

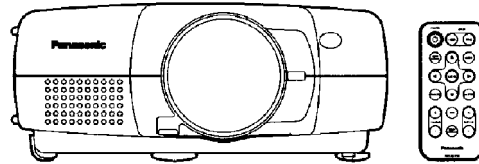
ORDER NO. VED0008301C0

D10

Service Manual

LCD Projector

PT-L711E / PT-L711U / PT-L701E / PT-L701U / PT-L501E / PT-L501U / PT-L1711 / PT-L1701 / PT-L1501



SPECIFICATIONS

The service technician is required to read and follow the "Safety Precautions" and "Important Safety Notice" in this service Manual.

Specifications

Power supply:

120 V - 240 V AC, 50 Hz / 60 Hz

Power consumption:

240 W (During standby (when fan is stopped):
Approx. 5 W - 10 W)

Amps:

2.8 A - 1.0 A

LCD panel:

Panel size (diagonal): 0.9 type (22.86 mm)

Aspect ratio: 4:3

Micro lens array:

PT-L711E/U, L1711: Available

Other models: Not available

Display method:

3 transparent LCD panels (RGB)

Drive method:

Active matrix method

Pixels:

PT-L501E/L501U/L1501: 480 000 (800 × 600) × 3 panels

Other models: 786 432 (1 024 × 768) × 3 panels

Lens:

Manual zoom (1 - 1.3) / focus lens,

F 1.8 - 2.1, f 28.7 mm - 36.0 mm

Lamp:

UML lamp (160 W)

Luminosity:

PT-L711E/L711U: 1 400 lm/ANSI

PT-L701E/L701U/L1701: 1 000 lm/ANSI

PT-L501E/L501U/L1501: 1 100 lm/ANSI

Scanning frequency:

Horizontal scanning frequency:

PT-L501E/L501U/L1501: 24 kHz - 81 kHz

Other models: 24 kHz - 97 kHz

Vertical scanning frequency: 50 Hz - 120 Hz

Dot clock frequency:

PT-L501E/L501U/L1501: 110 MHz or less

Other models: 135 MHz or less

YPbPr signals:

NTSC (480i), 480p, PAL (625i), 720p,

HDTV (1 080i / 1 035i)

Color system:

6 (NTSC / NTSC 4.43 / PAL / PAL-M / PAL-N / SECAM)

Projection size:

762 mm - 7 620 mm

Throw distance:

1.1 m - 11.7 m

Optical axis shift:

1/10 (fixed)

Screen aspect ratio:

4:3

Installation:

Front / Rear / Ceiling / Desk (Menu selection method)

Speakers:

2.8 cm round × 2

Max. useable volume output:

2 W (1 W + 1 W) EIAJ (stereo)

Connectors:

RGB1 IN: Dual-line D-SUB HD 15-pin (female)

During YPbPr input: Y: 1.0 V [p-p], 75 Ω,

PbPr: 0.7 V [p-p], 75 Ω

During RGB input: R/G/B: 0.7 V [p-p], 75 Ω, G.SYNC:

1.0 V [p-p], 75 Ω, HD/SYNC: TTL high impedance,

automatic plus/minus polarity compatible

AUDIO IN (for RGB):

Double-line 0.5 V [rms] M3 jack (Stereo Mini)

VIDEO IN:

Single-line, RCA pin jack, 1.0 V [p-p], 75 Ω

S-VIDEO IN:

Single-line, Mini DIN 4 pin,

Y: 1.0 V [p-p],

C: 0.286 V [p-p], 75 Ω

AUDIO IN (for S-VIDEO / VIDEO):

0.5 V [rms] RCA pin jack × 2 (L/R)

AUDIO OUT:

Single-line 0.5 V [rms] M3 jack

(Stereo Mini)

(Monitor output / stereo compatible),

0 V [rms] - 2.0 V [rms] (variable)

Cabinet:

Molded plastic

Dimensions:

Width: 233 mm

Height: 98 mm

Length: 330 mm (with lens cover fit)

Weight:

3.8 kg

Operating environment:

Temperature: 0° C - 40° C

Humidity: 20 % - 80 % (no condensation)

Certifications:

PT-L711E/701E/501E: EN60950, EN55022,

EN61000-3-2,

EN61000-3-3,

EN55024

PT-L711U/701U/501U: UL1950, C-UL, FCC

PT-L1711/L1701/L1501: GB4943, GB9254

< Remote control unit >

Power supply:

3 V DC (Lithium CR2025 battery × 1)

Operating range:

Approx. 7 m

(when operated directly in front of signal receptor)

Dimensions:

Width: 40 mm

Height: 6.5 mm

Length: 86 mm

Weight: 18 g (including battery)

Accessories:

Card remote control unit (TNQE239): 1

Lithium battery for remote control unit (CR2025): 1

Power cord: 1

RGB signal cable (TSXF163): 1 (2.0 m)

Video/Audio cable (TSXF015): 1 (1.5 m)

Lens cover (TKKL5139): 1

Carrying bag: 1

Options:

Ceiling bracket: ET-PK701

Wireless remote control unit: ET-RM100

· Specifications are subject to change without notice.

· Weight and dimensions shown are approximate.

Panasonic

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 - S-VGA is a registered trade mark of the Video Electronics Standards Association.
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For US

IMPORTANT SAFETY NOTICE

There are special parts used in Panasonic LCD Projectors which are important for safety. These parts are shaded on the schematic diagram. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of PANASONIC BROADCAST & TELEVISION SYSTEMS COMPANY.

Caution: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

FCC Warning: To assure continued FCC emission limit compliance, use only the provided grounded power supply cord and shielded interface cable with ferrite core when connecting this device to a computer. Also, any unauthorized changes or modifications to this equipment would void the users authority to operate this device.

Note: This LCD Projector may only be used in a commercial, business or industrial environment.

1. Safety Precautions

1.1. General Guidelines

- For continued safety, no modification of any circuit must be attempted.
- Unplug the power cord from the power outlet before disassembling this projector.
- It is advisable to use an isolation transformer in the AC power line before the service.
- Observe the original lead dress during the service. If a short circuit is found, replace all the parts overheated or damaged by the short circuit.
- After the service, all the protective devices such as insulation barriers, insulation papers, shields, and isolation R-C combinations must be properly installed.
- After the service, check the leakage current to prevent the customer from getting an electric shock.

1.2. Leakage Current Check

1. Prepare the measuring circuit as shown in Fig.1.

Be sure to use a voltmeter having the performance described in Table 1.

Fig. 1

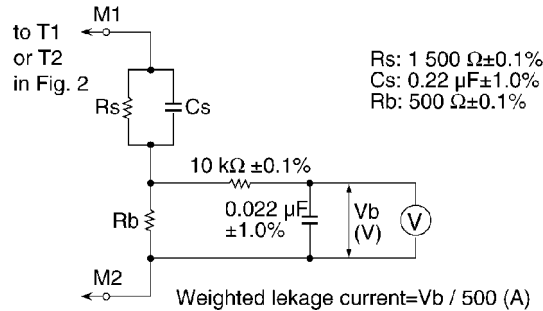
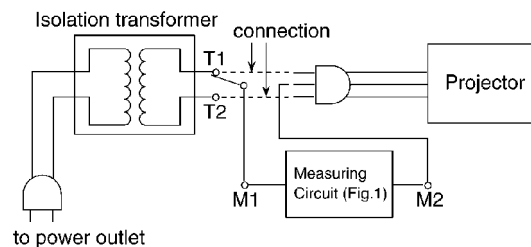


Table 1

| | Performance |
|----------------------------|---------------------------------------|
| Voltmeter (rms reading) | Accuracy: $\leq 2\%$ |
| | Input resistance: ≥ 1 M Ω |
| | Input capacitance: ≤ 200 pF |
| | Frequency range: 15 Hz to 1 MHz |

Fig. 2

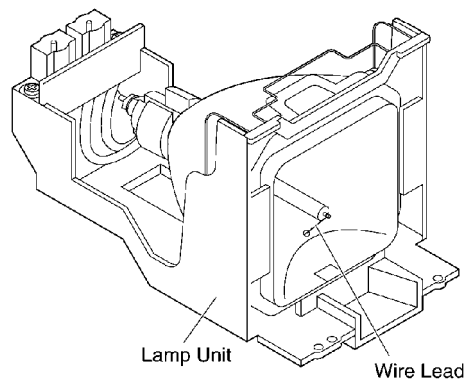


2. Assemble the circuit as shown in Fig. 2. Plug the power cord in a power outlet.
3. Connect M1 to T1 according to Fig. 2 and measure the voltage.
4. Change the connection of M1 from T1 to T2 and measure the voltage again.
5. The voltmeter must read 0.375 V or lower in both of steps 3 and 4. This means that the current must be 0.75 mA or less.
6. If the reading is out of the above standard, the projector must be repaired and rechecked before returning to the customer because of a possibility of an electric shock.

1.3. UV Precaution and UHM Lamp Precautions

- Be sure to unplug the power cord from the power outlet when replacing the lamp.
- Because the lamp reaches a very high temperature during its operation, wait until it cools completely when replacing the Lamp Unit.
- The lamp emits small amounts of UV-radiation, avoid direct-eye contact with the light.
- Because the high pressure lamp involves a risk of explosion, never touch the lamp wire lead during the service. (See Fig. 3)

Fig. 3



2. Operating Instructions

3. Self-Check Mode

This mode is used to narrow down the location of the failure.

3.1. Procedure to enter the self-check mode

While pressing the VOLUME "—" button on the remote control unit, press the left-arrow "◀" button on the main unit 3 seconds or longer.

3.2. Self-Check Display and Contents

| SELF CHECK | | | |
|------------|--------------|----|-------------------|
| (1) → | R1.02 | | |
| (2) → | VGA480 | | |
| (3) → | H ***.***kHz | | |
| (4) → | V ***.***Hz | | |
| (5) → | VGA60 | | |
| (6) → | LAMP | | |
| (7) → | 1000H | | |
| (8) → | 1000H | | |
| (9) → | 1000H | | |
| (10) → | 2000H | OK | |
| (11) → | LAMP | OK | |
| (12) → | G LOAD | OK | TEMP 1 *** ← (16) |
| (13) → | G SAVED | OK | TEMP 2 *** ← (17) |
| (14) → | TEMP | OK | ANGLE *** ← (18) |
| (15) → | FAN | OK | ANGLE[0] ← (19) |

| Display Contents | Remarks |
|---|---------------------------|
| (1) Microcomputer Version Display | EEPROM Software Version |
| (2) Resolution Name | |
| (3) Horizontal Signal Frequency | RGB signal reception only |
| (4) Vertical Signal Frequency | RGB signal reception only |
| (5) Signal Name | RGB signal reception only |
| (6) Lamp | |
| (7) Lamp Cumulative Usage Time | Current Usage Time |
| (8) Lamp Cumulative Usage Time | Second Usage Time |
| (9) Lamp Cumulative Usage Time | First Usage Time |
| (10) Lamp Cumulative Usage Time Check | Replacement Timing Check |
| (11) Lamp Abnormality Check | Cause of Lamp Malfunction |
| (12) Gamma Correction Data Check | |
| (13) Gamma Correction Data Check | |
| (14) Temperature Abnormality Check | Cause of Lamp Malfunction |
| (15) Fan Stop Check | Cause of Lamp Malfunction |
| (16) Temperature Sensor 1 Measurement Value | Around the panel |
| (17) Temperature Sensor 2 Measurement Value | Around the intake slot |
| (18) Tilt Sensor Measurement Value | |
| (19) Tilt Sensor Reference Value | At horizontal level |

Note:

- This display is an example and the display contents depend on the input signal mode.
- [OK] ----- Normal, [-] ----- Failure

3.3. Canceling the self-check mode

Press the **MENU** button on the main unit or the remote control unit.

4. Service Mode

This mode is used to display three kinds of test patterns (Crosshatch, Flicker Adjustment and White) in the four colors (White, Red, Green and Blue).

4.1. Procedure to enter the service mode

1. Select "FRONT/REAR" on the **OPTION** menu.
MENU → OPTION → FRONT/REAR
2. While pressing the **VOLUME "+"** button on the remote control unit, press the left-arrow "◀" button on the main unit 3 seconds or longer to enter the service mode.
3. In the service mode, pressing the up-arrow "▲" or down-arrow "▼" button on the remote control unit allows the test pattern selection [Horizontal Lines / Vertical Lines / Dots / White (No pattern)] and the left-arrow "◀" or right-arrow "▶" button the color selection (White / Red / Green / Blue).

4.2. Canceling the service mode

Press the **MENU** button on the main unit or the remote control unit.

5. Disassembly Instructions

Warning:

- Be sure to unplug the power cord from the power outlet before

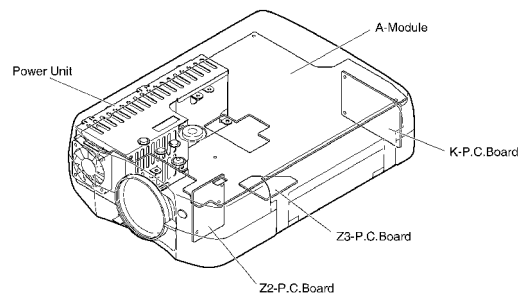
disassembling this projector.

Caution:

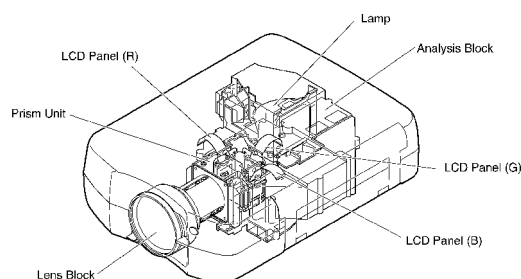
- While turning over a printed circuit board, be sure to put a insulating material under it to prevent a short circuit.
- Printed circuit boards and wires must not be pulled forcibly, but be handled carefully.
- Connectors also must be handled carefully.
- After repairing this projector, be sure to put back the wires and connectors to the original condition.

5.1. Printed Circuit Board and Main Parts Location

Electrical Parts

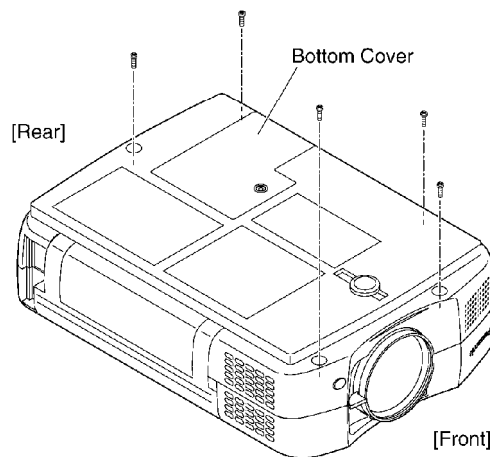


Optical Parts

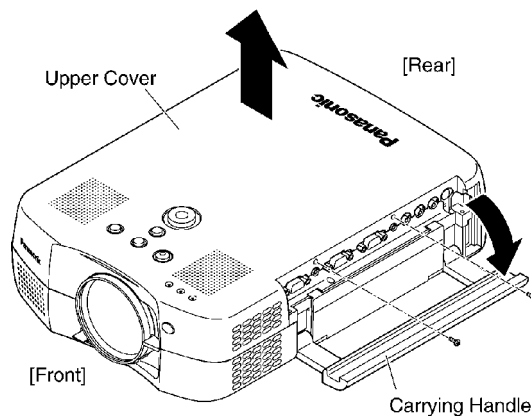


5.2. Removal of Upper Cover

1. Turn over (upside down) the main unit and unscrew the 5 screws fixing the upper cover.



2. Return the main unit to the normal position and extend the carrying handle.



3. Unscrew the 2 screws.
4. Lift the upper cover and disconnect the 2 connectors from the speakers.

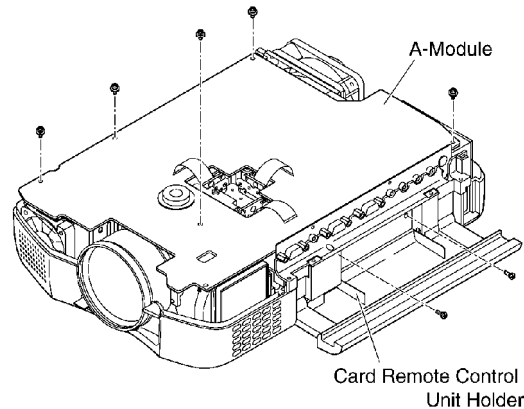
5.3. Removal of A-Module

Notes:

- If replacing A-Module, read the microcomputer and gamma data from the old module and write it in the new one according to the section 6.5. "Software for Adjustment". (If not, remove IC1041 and IC1036 from the old module and replace them on the new module.)
- If replacing A-Module, adjust the Input Level according to the chapter 6 "Measurement and Adjustments".

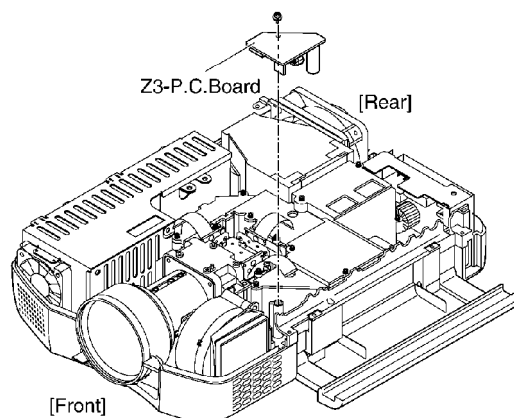
1. Remove the upper cover according to the section 5.2. "Removal of Upper Cover".

2. Open the card remote control unit holder.
3. Unscrew the 2 screws fixing the connector panel.
4. Disconnect the connectors from/to the A-Module.
5. Unscrew the 5 screws and remove the A-Module.



5.4. Removal of Z3-P.C.Board

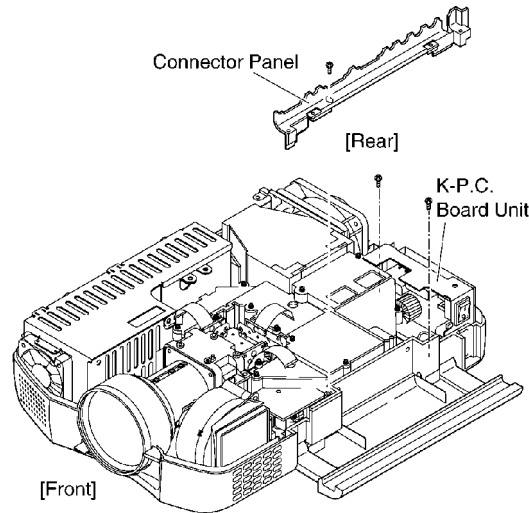
1. Remove the upper cover according to the section 5.2. "Removal of Upper Cover".
2. Remove the A-Module according to the section 5.3. "Removal of A-Module".
3. Unscrew the 1 screw fixing the Z3-P.C.Board.
4. Disconnect the connector and remove the Z3-P.C.Board.



5.5. Removal of K-P.C.Board

1. Remove the upper cover according to the section 5.2. "Removal of Upper Cover".

2. Remove the A-Module according to the section 5.3. "Removal of A-Module".
3. Unscrew the 1 screw and remove the connector panel.
4. Unscrew the 2 screws fixing the K-P.C.Board unit.
5. Disconnect the connector and remove the K-P.C.Board unit.

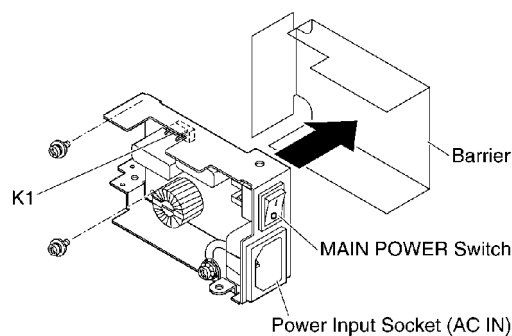


6. Remove the barrier for insulation.

Note:

- Above procedure (steps 1-6) becomes possible to replace components of the K-P.C.Board.

7. Unscrew the 2 screws fixing the K-P.C.Board.
8. Unsolder terminals of the power input socket (AC IN).
9. Unsolder terminals of the MAIN POWER switch and remove the K-P.C.Board.

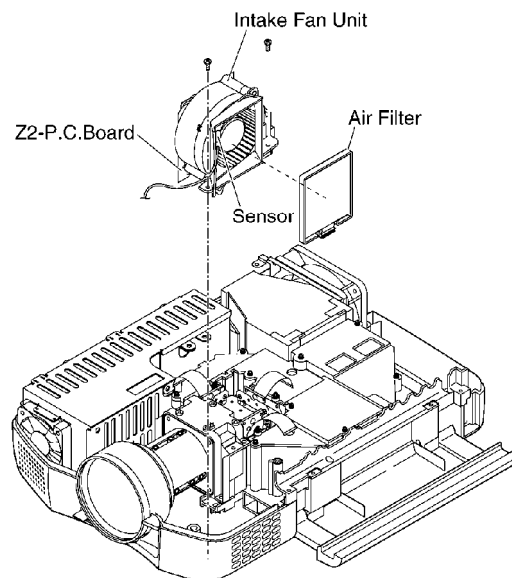


5.6. Removal of Z2-P.C.Board

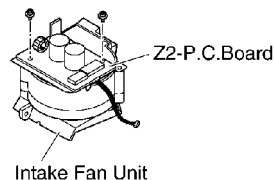
1. Remove the upper cover according to the section 5.2. "Removal of Upper Cover".
2. Remove the A-Module according to the section 5.3. "Removal of A-Module".
3. Remove the Z3-P.C.Board according to the section 5.4. "Removal of Z3-P.C.Board".
4. Unscrew the 2 screws fixing the intake fan unit.
5. Disconnect the connectors and remove the intake fan unit with the air filter.

Note:

- When reassembling, must set the sensor to the original position.



6. Unscrew the 2 screws and remove the Z2-P.C.Board.

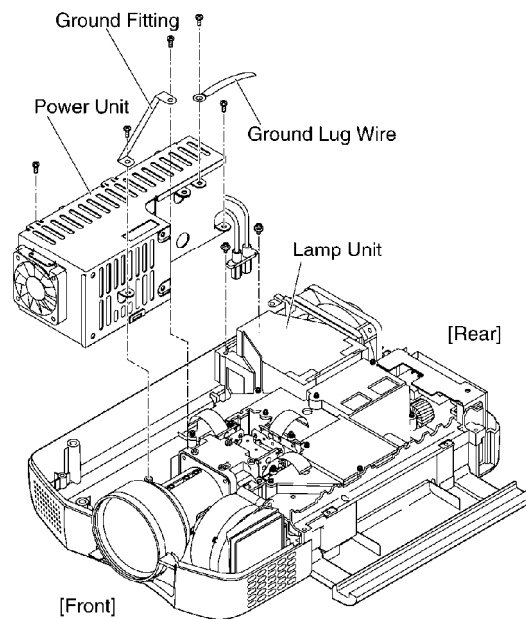


5.7. Removal of Power Unit

1. Remove the upper cover according to the section 5.2. "Removal of Upper Cover".
2. Remove the A-Module according to the section 5.3. "Removal of A-

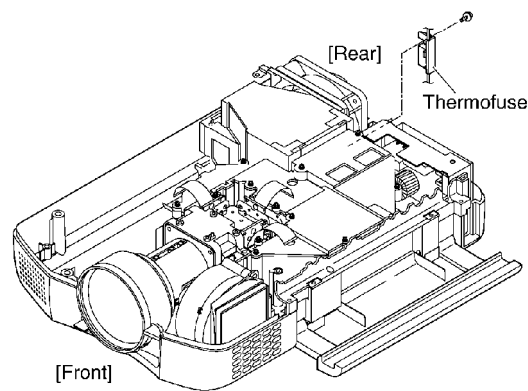
Module".

- 3. Disconnect the connector to the Z2-P.C.Board.**
- 4. Unscrew the 2 screws fixing the connector to the lamp unit.**
- 5. Unscrew the 1 screw fixing the ground lug.**
- 6. Unscrew the 1 screw (optical block side) fixing the ground fitting.**
- 7. Unscrew the 3 screws fixing the power unit.**
- 8. Take the power unit out and disconnect the connectors.**

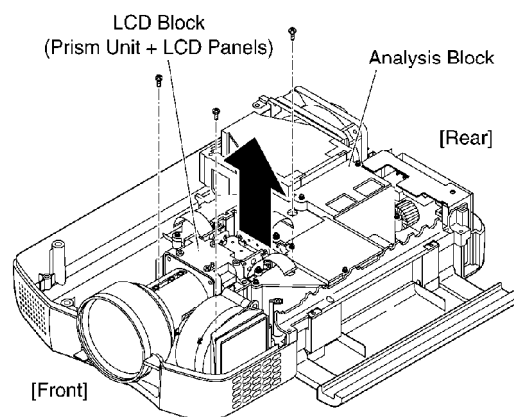


5.8. Removal of Analysis/LCD Blocks

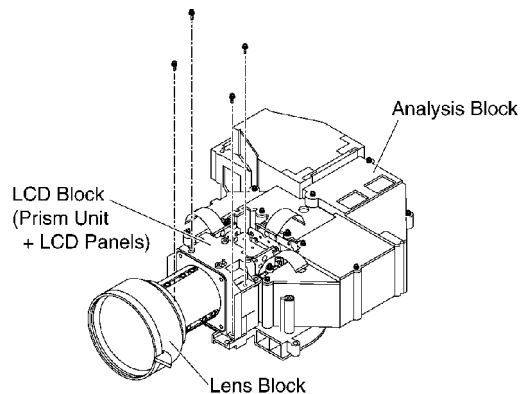
- 1. Remove the upper cover according to the section 5.2. "Removal of Upper Cover".**
- 2. Remove the A-Module according to the section 5.3. "Removal of A-Module".**
- 3. Remove the Z3-P.C.Board according to the section 5.4. "Removal of Z3-P.C.Board".**
- 4. Remove the power unit according to the section 5.7. "Removal of Power Unit".**
- 5. Unscrew the 1 screw and remove the thermofuse.**



6. Unscrew the 3 screws and remove the analysis/LCD blocks.

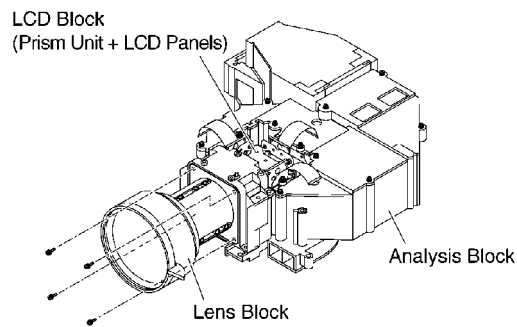


7. Unscrew the 4 screws and separate the analysis/LCD blocks.



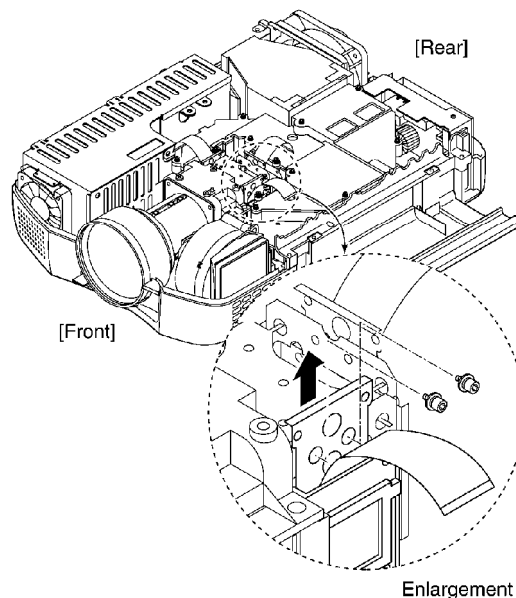
5.9. Removal of Lens Block

- 1. Remove the analysis/LCD blocks according to steps 1-7 in the section 5.8. "Removal of Analysis/LCD Blocks".**
- 2. Unscrew the 4 screws and remove the lens block.**



5.10. Removal of LCD Panel

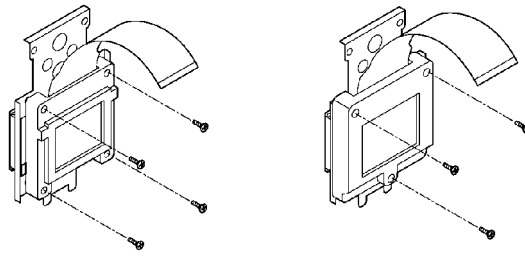
1. Remove the upper cover according to the section 5.2. "Removal of Upper Cover".
2. Remove the A-Module according to the section 5.3. "Removal of A-Module".
3. Use a hexagon head wrench, unscrew the 2 screws fixing the bracket.
4. Lift the bracket with LCD panel carefully and take it out.



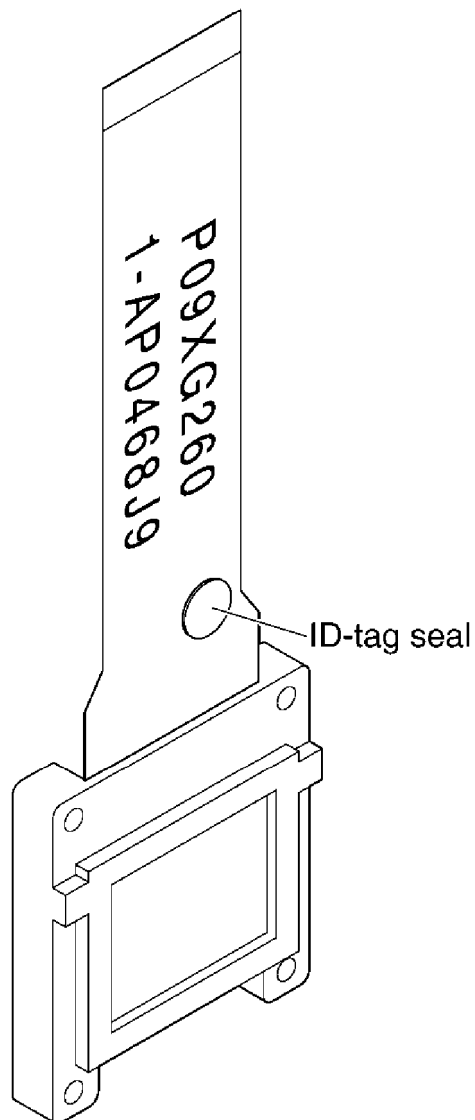
5. Unscrew the screws and remove the LCD panel.

Note:

PT-L7*/L17** = 4 screws, PT-L5***/L15** = 3 screws**



5.11. LCD Panel Discrimination



| ID-tag seal color | LCD panel |
|-------------------|---------------|
| Red | LCD panel (R) |
| Blue | LCD panel (B) |
| (No seal) | LCD panel (G) |

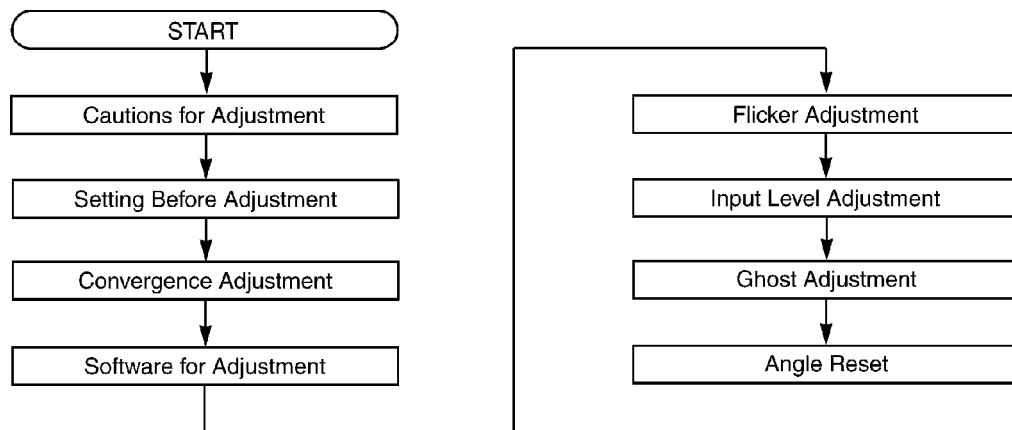
5.12. LCD Panel Combination

- There are two combinations for each series.
- Part number is printed on the FPC of LCD panel.
- When replacing LCD panel, use a component which has the same part number as the original.

| Model number | LCD panel | Combination 1 | Combination 2 |
|----------------------------|-----------|----------------------------|----------------------------|
| PT-L711E/ U PT-L1711 | R | L5BDAXQ00029 (P09XG250) | L5BDAXQ00032 (P09XG260) |
| | G | L5BDAXQ00033 (P09XG260) | L5BDAXQ00030 (P09XG250) |
| | B | L5BDAXQ00031 (P09XG250) | L5BDAXQ00034 (P09XG260) |
| PT-L701E/ U PT-L1701 | R | L5BDAXQ00023 (P09XG210) | L5BDAXQ00026 (P09XG220) |
| | G | L5BDAXQ00027 (P09XG220) | L5BDAXQ00024 (P09XG210) |
| | B | L5BDAXQ00025 (P09XG210) | L5BDAXQ00028 (P09XG220) |
| PT-L501E/ U PT-L1501 | R | L5BDAXN00004 (P09SG110) | L5BDAXN00007 (P09SG120) |
| | G | L5BDAXN00008 (P09SG120) | L5BDAXN00005 (P09SG110) |
| | B | L5BDAXN00006 (P09SG110) | L5BDAXN00009 (P09SG120) |

6. Measurement and Adjustments

6.1. Adjustment Procedure Flowchart

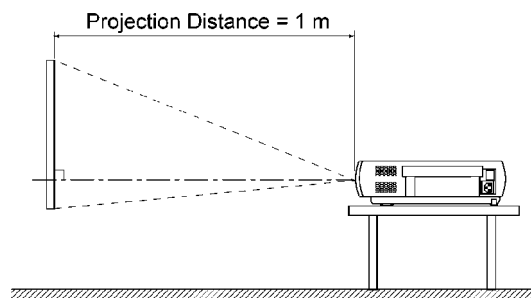


6.2. Cautions for Adjustment

- Never turn off the MAIN POWER switch until every fan completely stops.
- To maintain and ensure safety, always use the designated components for replacement parts.
- If removing any clamps, lead wires or connectors, always place them back in their proper locations.
- Be careful not to damage the lead wires or components when using a soldering iron or similar tool.

6.3. Setting Before Adjustment

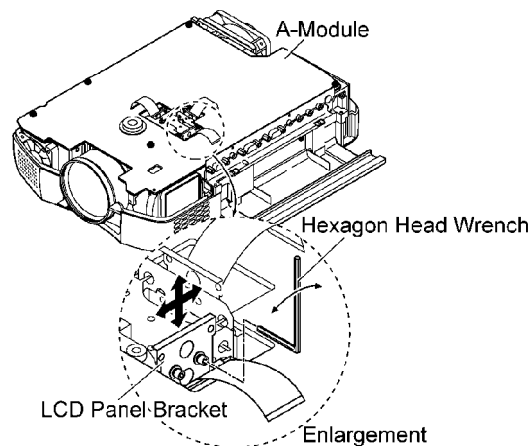
- Set up the projector to obtain the projection distance below.
- Turn the zoom knob of the lens block to obtain the largest size of the picture.



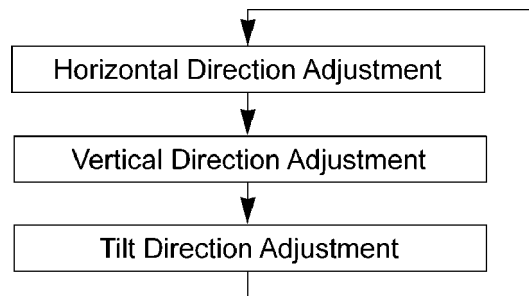
6.4. Convergence Adjustment

6.4.1. Basic Adjustment Procedure

1. Use a hexagon head wrench, loosen the 2 screws just until the bracket can be moved by your fingers.



2. Repeat the following steps until the red, green and blue crosshatch patterns merge into a white pattern.



Note:

- Because the projected picture may move opposite in direction to the move of the LCD panel, adjust the convergence observing the real projected picture carefully.

3. Use a hexagon head wrench, tighten the 2 screws to secure the bracket (LCD panel).

Note:

- Be careful not to move the bracket when tighten the screws.

6.4.2. Adjustment after Every LCD Panel or LCD Block Replacement

1. Connect a PC to the RGB connector and display the green crosshatch pattern (service pattern data is required), then adjust the lens focus.
2. Adjust the LCD panel (G) position to place the center position of the crosshatch pattern to the center on the screen.
3. Correct the tilt of the green crosshatch pattern.
4. Display the white crosshatch pattern.
5. Adjust the LCD panels (R) and (B) to merge the red and blue

patterns with the green one.

6.4.3. Adjustment after LCD Panel (G) Replacement

1. Connect a PC to the RGB connector and display the white crosshatch pattern (service pattern data is required), then adjust the lens focus.
2. Adjust the LCD panel (G) to merge the green pattern with the red and blue ones.

6.4.4. Adjustment after LCD Panel (R) Replacement

1. Connect a PC to the RGB connector and display the white crosshatch pattern (service pattern data is required), then adjust the lens focus.
2. Adjust the LCD panel (R) to merge the red pattern with the green and blue ones.

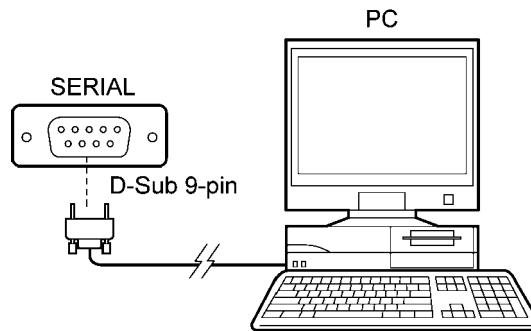
6.4.5. Adjustment after LCD Panel (B) Replacement

1. Connect a PC to the RGB connector and display the white crosshatch pattern (service pattern data is required), then adjust the lens focus.
2. Adjust the LCD panel (B) to merge the blue pattern with the green and red ones.

6.5. Software for Adjustment

6.5.1. Outline

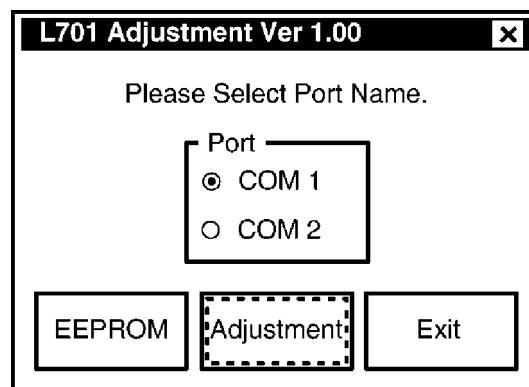
1. This projector needs computer-aided adjustments.
2. After the software adjustments, this projector must be turned off and on again to memorize the settings.
3. Connect the cable between the projector and a PC as shown below.
4. Updating the software will change the version number.



6.5.2. Operating Procedure

1. Insert the floppy disk and run the software program by the keyboard entry.
2. The first menu is the port selection menu.
3. Adjust the projector by selecting the necessary item from the menu in each stage.

6.5.3. Port Selection Menu



Select "COM1" or "COM2" and click "EEPROM" or "Adjustment".

6.5.3.1. Explanation of Buttons

EEPROM:

Displays the EEPROM control menu.

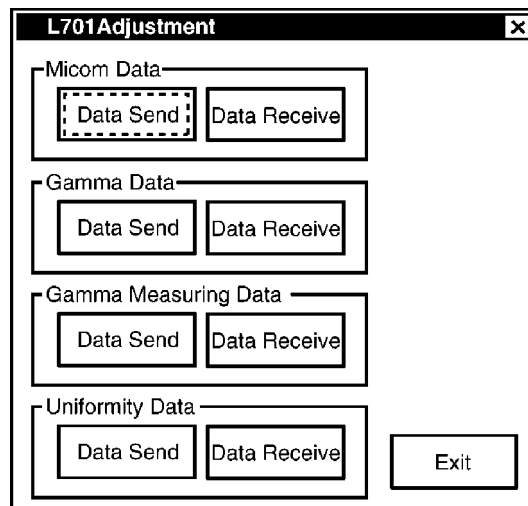
Adjustment:

Displays the adjustment menu.

Exit:

Exits this application.

6.5.4. EEPROM Control Menu



6.5.4.1. Explanation of Buttons

Micom Data Send:

Reads the microcomputer data from the file and sends it to the projector.

Micom Data Receive:

Receives the microcomputer data from the projector and writes it in the file.

Gamma Data Send:

Reads the gamma data from the file and sends it to the projector.

Gamma Data Receive:

Receives the gamma data from the projector and writes it in the file.

Gamma Measuring Data Send:

Reads the LCD panel characteristic data (original gamma data) from the file and sends it to the projector.

Gamma Measuring Data Receive:

Receives the LCD panel characteristic data (original gamma data) from the projector and writes it in the file.

Uniformity Data Send:

Reads the color unevenness correction data from the file and sends it to the projector.

Uniformity Data Receive:

Receives the color unevenness correction data from the projector and writes it in the file.

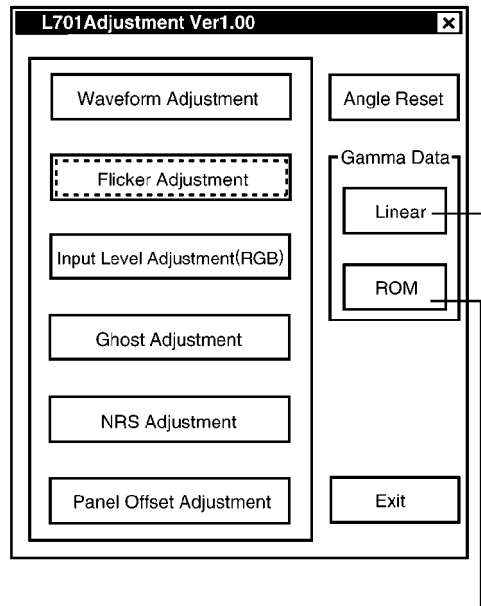
Exit:

Exits this application.

6.5.4.2. Receive and sending of the data

Click a target button and specify a file name.

6.5.5. Adjustment Menu



Do not click these buttons.

6.5.5.1. Explanation of Buttons

Waveform Adjustment:

This button is not available.

Flicker Adjustment:

Displays the flicker adjustment menu.

Input Level Adjustment (RGB):

Displays the input level adjustment menu.

Ghost Adjustment:

Displays the ghost adjustment menu.

NRS Adjustment:

This button is not available.

Panel Offset:

This button is not available.

Angle Reset:

Displays the angle reset menu.

Gamma Data Linear:

This button is only used for factory. (Do not click this button.)

Gamma Data ROM:

This button is only used for factory. (Do not click this button.)

Exit:

Exits this application.

6.6. Flicker Adjustment

6.6.1. Adjustment Menu

L701Adjustment Ver1.00 - Flicker Adjustment

Installation: ☒ Desk ☐ Ceil

R Signal: **R Signal Adj.** Standard Value: 7E Setting Value: 7E ☐ OK

G Signal: G Signal Adj. Standard Value: 7E Setting Value: 75 ☐ OK

B Signal: B Signal Adj. Standard Value: 7E Setting Value: 7E ☐ OK

Stop

Undo

Close

6.6.2. Explanation of Buttons

Desk:

Sets the installation mode to the desk setting and receive the current data.

Ceil:

Sets the installation mode to the ceiling setting and receive the current data.

R Signal Adj.:

Sets the test signal mode to the R-signal and allows the "▲", "▼" and "OK" buttons of the R-signal to become active.

G Signal Adj.:

Sets the test signal mode to the G-signal and allows the "▲", "▼" and "OK" buttons of the G-signal to become active.

B Signal Adj.:

Sets the test signal mode to the B-signal and allows the "▲", "▼" and "OK" buttons of the B-signal to become active.



Changes the setting value and transmits its data. (The 8 and 2 keys on the keyboard have the same functions.) If releasing the mouse or key after pressing it continuously, the data is transmitted once. The variable setting value is enclosed in a box and using the TAB or SPACE key allows the move of the box.

OK:

Determines the setting value and stores its data in the EEPROM. (The ENTER key on the keyboard has the same function.) The item having two or more kinds of setting values is processed two or more items. Clicking this button or pressing ENTER key changes the color of the text "OK" to cyan (light blue). If changing the setting value using the "▲" or "▼" button or the 8 or 2 key, its color returns to black.

Stop:

Discontinues the communication. (This button is usually set for its inactive mode.)

Undo:

Returns the setting value to its original state and transmits its data. The color of the text "OK" returns to black.

Close:

Closes this menu.

6.6.3. Equipment to be used

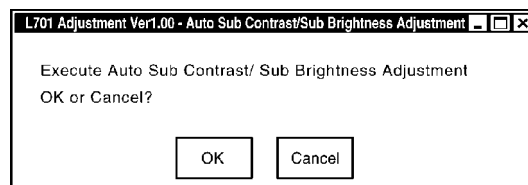
PC, Software for Adjustment

6.6.4. Adjustment Procedure

1. Display the flicker adjustment menu.
2. Set the installation mode to the desk setting.
3. Click "R Signal Adj," and the red flicker adjustment pattern will be displayed.
4. Minimize the flicker while observing the projected pattern.
5. Click "G Signal Adj," and the green flicker adjustment pattern will be displayed.
6. Minimize the flicker while observing the projected pattern.
7. Click "B Signal Adj," and the blue flicker adjustment pattern will be displayed.
8. Minimize the flicker while observing the projected pattern.
9. Change the installation mode to the ceiling setting and follow steps 3 to 8 inclusive.

6.7. Input Level Adjustment

6.7.1. Adjustment Menu



6.7.2. Explanation of Buttons

OK:

Executes automatic sub contrast and sub brightness adjustments, then closes this dialog.

Cancel:

Cancels this menu.

6.7.3. Equipment to be used

PC, Software for Adjustment, Signal Generator

6.7.4. Adjustment Procedure

1. Display the input level adjustment menu.

2. Input a window pattern signal.

Note:

Use approx. 15 % window pattern as follows.

Black background (screen width) : White window width = 2 : 1

Black background (screen height) : White window height = 3 : 1

3. Click the OK button.

6.8. Ghost Adjustment

6.8.1. Adjustment Menu

The screenshot shows a software window titled "L701Adjustment Ver1.00 - Ghost Adjustment". Inside, there are two adjustment sections. The first section, "G-Ghost Adj.", has a "Standard Value" of 02 and a "Setting Value" of 05, with an "OK" button. The second section, "RGB-Ghost Adj.", also has a "Standard Value" of 02 and a "Setting Value" of 05, with an "OK" button. To the right of these sections are three buttons: "Stop", "Undo", and "Close".

6.8.2. Explanation of Buttons



Changes the setting value and transmits its data. (The 8 and 2 keys on the keyboard have the same functions.) If releasing the mouse or key after pressing it continuously, the data is transmitted once. The variable setting value is enclosed in a box and using the TAB or SPACE key allows the move of the box.

OK:

Determines the setting value and stores its data in the EEPROM. (The ENTER key on the keyboard has the same function.) The item having two or more kinds of setting values is processed two or more items. Clicking this button or pressing ENTER key changes the color of the text "OK" to cyan (light blue). If changing the setting value using the "▲" or "▼" button or the 8 or 2 key, its color returns to black.

Stop:

Discontinues the communication. (This button is usually set for its inactive mode.)

Undo:

Returns the setting value to its original state and transmits its data. The color of the text "OK" returns to black.

Close:

Closes this menu.

6.8.3. Equipment to be used

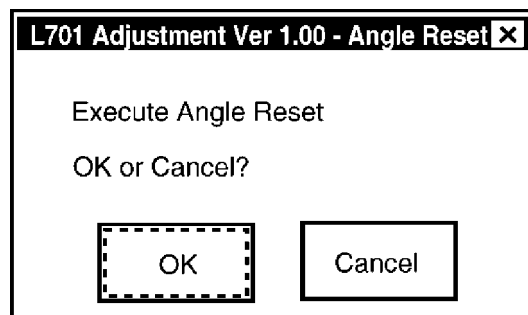
PC, Software for Adjustment, Signal Generator

6.8.4. Adjustment Procedure

1. Display the ghost adjustment menu.
2. Input a checker pattern signal.
3. Minimize the ghost while observing the projected pattern.
4. Set the value to the point being its optimum value minus 1.

6.9. Angle Reset

6.9.1. Adjustment Menu



6.9.2. Explanation of Buttons

OK:

Executes angle reset, then closes this dialog.

Cancel:

Cancels this menu.

6.9.3. Equipment to be used

PC, Software for Adjustment

6.9.4. Adjustment Procedure

1. Display the angle reset menu.
2. Set the projector on a horizontal place.

Note:

This is used for the reference level of the tilt sensor.

3. Click the OK button.

7. Troubleshooting

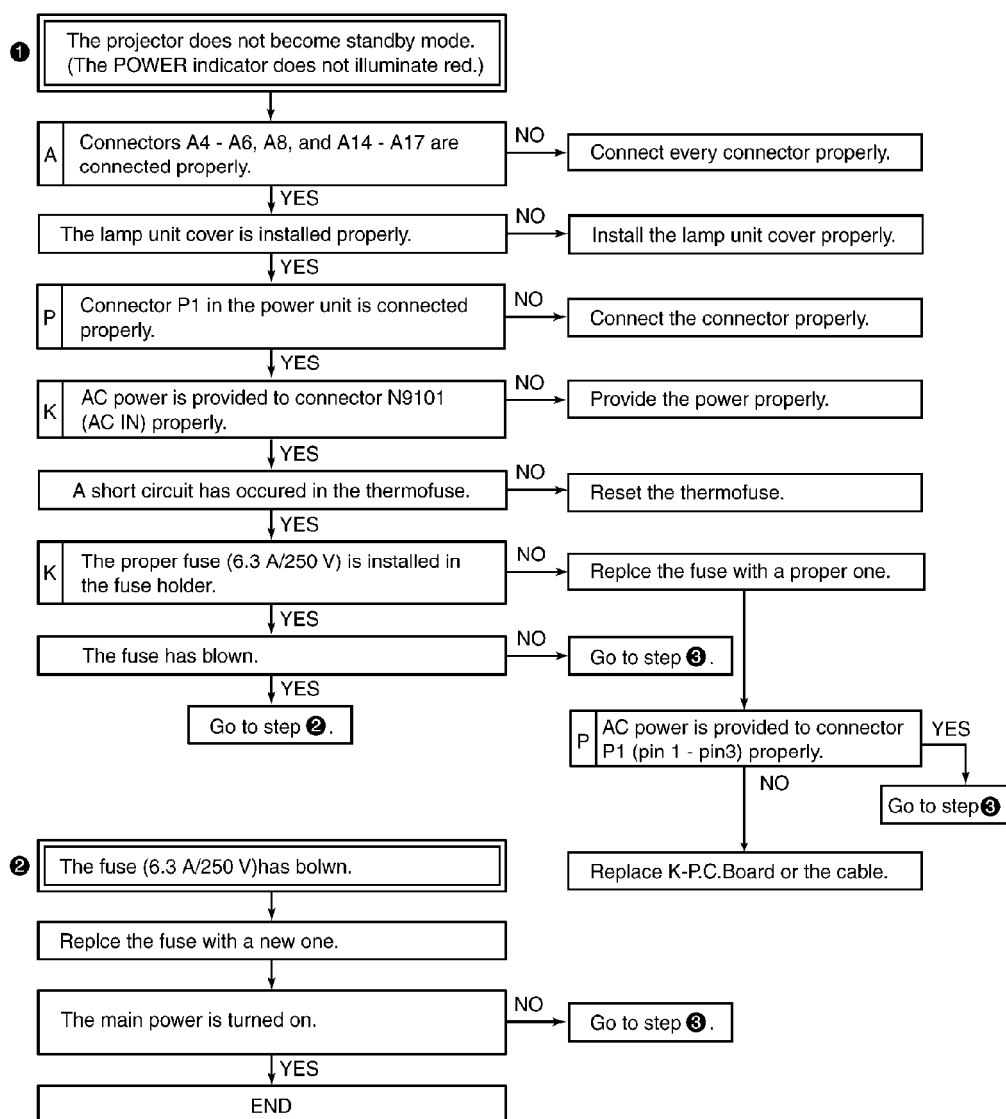
- The letters in the left of the inspection items indicate the module, unit or P.C. Board related to their respective descriptions.

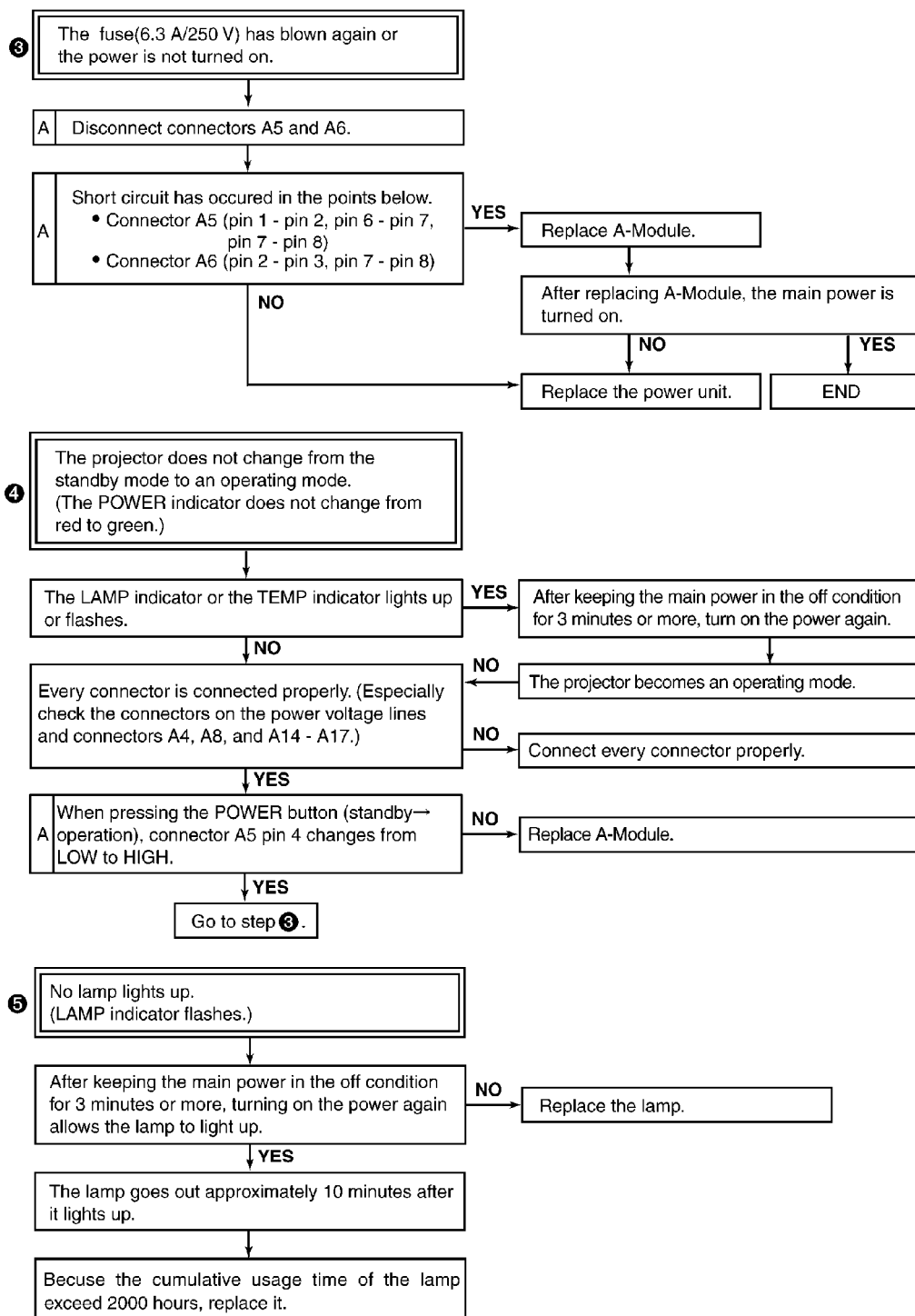
Note: A

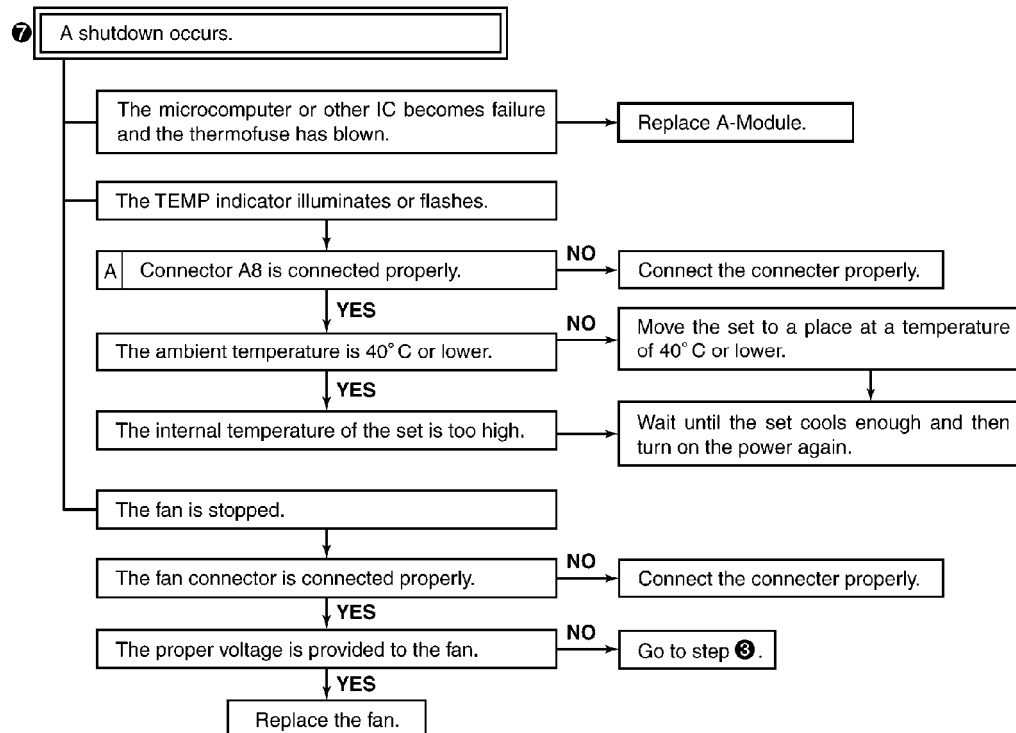
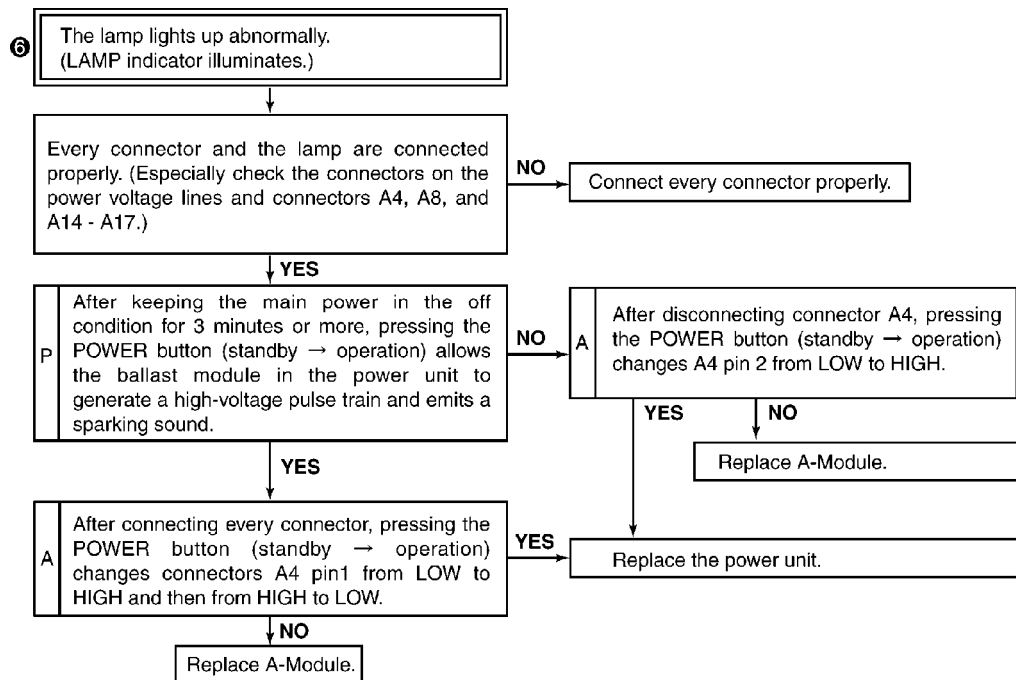
The letter of the alphabet indicates the module, unit or P.C. Board name.

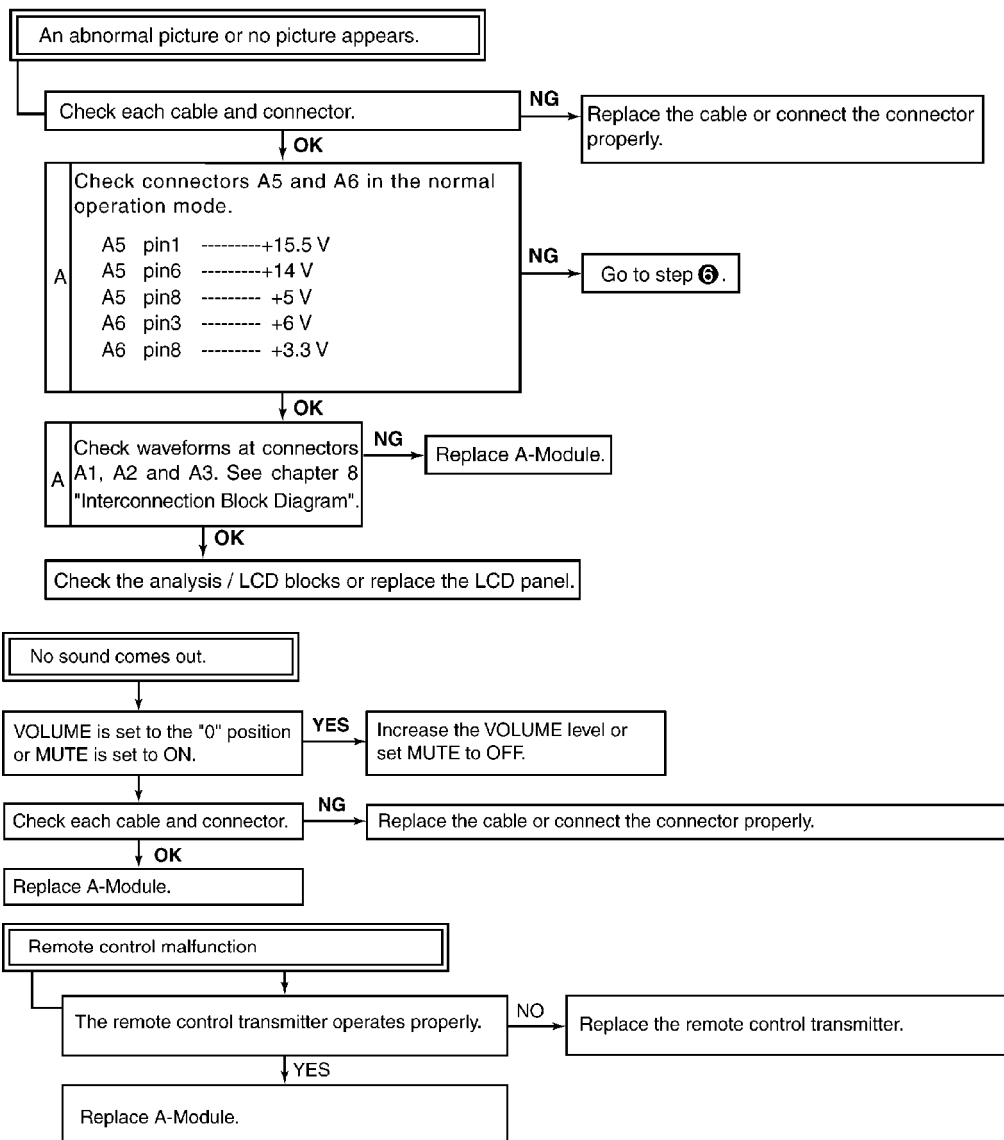
(Example) A: A-Module, P :Power Unit, K: K-P.C.Board

- If replacing A-Module, read the microcomputer and gamma data from the old module and write it in the new one according to the section 6.5. "Software for Adjustment" (if not, remove IC1041 and IC1036 from the old module and replace them on the new module).
- If replacing A-Module, adjust the Input Level according to the chapter 6 "Measurement and Adjustments".









8. Interconnection Block Diagram

8.1. Interconnection Block Diagram (1/2)

8.2. Interconnection Block Diagram (2/2)

9. Block Diagram


9.1. Signal Processing (1/2)

9.2. Signal Processing (2/2)

9.3. Power Supply

10. Schematic Diagram

Schematic Diagram for PT-L711E / L701E / L501E / L1711 / L1701 / L1501

Important Safety Notice
Components identified by the international symbol  have special characteristics important for safety. When replacing any of these components, use only the manufacturer's specified ones.

Schematic Diagram for Models PT-L711U / L701U / L501U

IMPORTANT SAFETY NOTICE
THE SHADED AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM FIRE AND ELECTRICAL SHOCK HAZARDS. WHEN SERVICING, IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS OF THE SCHEMATIC.









Notes:

1. Resistor

All the resistors are carbon 1/4W resistors, unless marked as follows: The unit of resistance is an OHM [Ω] (K=1 000 M=1 000 000).

-  : Nonflammable
-  : Metal Oxide
-  : Solid
-  : Metal Film
-  : Wire Wound
-  : Fuse

2. Capacitor

-  : Temperature Compensation
-  : Electrolytic
-  : Polyester
-  : Bipolar
-  : Metalized Polyester
-  : Dipped Tantalum
-  : Polypropylene
-  : Z-Type

3. Coil

The unit of inductance is a μH, unless otherwise noted.

4. Test Point

-  : Test Point

5. Voltage Measurement

The voltage is measured by an electronic voltmeter receiving the colorbar signal when all the customer's controls are set to the standard condition.

6. Color code for the links between diagrams and circuit boards

| From/To | | To/From | Color code |
|-------------------|---|-------------------|-------------------|
| Block diagram | ↔ | Schematic diagram | Magenta |
| Schematic diagram | ↔ | Schematic diagram | Green |
| Schematic diagram | ↔ | Circuit boards | Yellow |
| Schematic diagram | ↔ | Waveforms | Cyan (Light blue) |

7. HOT and COLD indications

The power circuit board contains a circuit area using a separate power supply to isolate the ground connection. The circuit is defined by HOT and COLD indications in the schematic diagram. Take the precautions below:

8. This schematic diagram is the latest at the time of printing and the subject to change without notice.

Precautions:

1. NEVER touch the HOT part or the HOT and COLD parts at the same time, or you may get an electric shock.
2. NEVER short-circuit the HOT and COLD circuits, or the fuse may blow and the parts may break.
3. NEVER connect an instrument such oscilloscope to the HOT and COLD circuit simultaneously, or the fuse may blow. Connect the ground of instruments to the ground of the circuit being measured.
4. MAKE SURE to unplug the power cord from the power outlet before removing the chassis.

10.1. K-P.C.Board

10.2. Z2-P.C.Board

10.3. Z3-P.C.Board





11. Circuit Boards


12. Exploded Views


| Ref. No. | Part No. | Part Name & Description | Remarks |
|----------|--------------|---------------------------|-----------------|
| | | [MECHANICAL PARTS] | |
| G1 | D4CDH5030001 | THERMISTOR | |
| K1 | K0AA0000012 | AC SWITCH | ⚠ |
| K2 | K2AH3G000009 | AC INLET | ⚠ |
| G2 | K5Y632B00001 | FUSE | ⚠ |
| K3 | L0AA02A00016 | SPEAKER | |
| K4 | L5BDAXQ00023 | LIQUID CRYSTAL DISPLAY(R) | L701U,L701U-G |
| | | [P09XG210(RED MARK)] | L701U-P,L701E |
| | | | L701E-G,L701E-P |
| | | | L1701 |
| | L5BDAXQ00029 | LIQUID CRYSTAL DISPLAY(R) | L711U,L711E |
| | | [P09XG250(RED MARK)] | L1711 |
| | L5BDAXN00004 | LIQUID CRYSTAL DISPLAY(R) | L501U,L501U-P, |
| | | [P09SG110(RED MARK)] | L501U-G,L501E, |
| | | | L501E-G,L501E-P |
| | | | L1501 |
| | L5BDAXQ00024 | LIQUID CRYSTAL DISPLAY(G) | L701U,L701U-G |
| | | [P09XG210(NO MARK)] | L701U-P,L701E |
| | | | L701E-G,L701E-P |
| | | | L1701 |
| K6 | L5BDAXQ00030 | LIQUID CRYSTAL DISPLAY(G) | L711U,L711E, |
| | | [P09XG250(NO MARK)] | L1711 |
| | L5BDAXN00005 | LIQUID CRYSTAL DISPLAY(G) | L501U,L501U-P, |
| | | [P09SG110(NO MARK)] | L501U-G,L501E, |
| | | | L501E-G,L501E-P |
| | | | L1501 |
| | L5BDAXQ00025 | LIQUID CRYSTAL DISPLAY(B) | L701U,L701U-G |
| | | [P09XG210 (BLUE MARK)] | L701U-P,L701E |
| | | | L701E-G,L701E-P |
| | | | L1701 |
| | L5BDAXQ00031 | LIQUID CRYSTAL DISPLAY(B) | L711U,L711E, |
| | | [P09XG250 (BLUE MARK)] | L1711 |
| | L5BDAXN00006 | LIQUID CRYSTAL DISPLAY(B) | L501U,L501U-P, |
| | | [P09SG110(BLUE MARK)] | L501U-G,L501E, |
| | | | L501E-G,L501E-P |
| | | | L1501 |
| K4 | L5BDAXQ00026 | LIQUID CRYSTAL DISPLAY(R) | L701U,L701U-G |
| | | [P09XG220 (RED MARK)] | L701U-P,L701E |
| | | | L701E-G,L701E-P |
| | | | L1701 |
| | L5BDAXQ00032 | LIQUID CRYSTAL DISPLAY(R) | L711U,L711E, |
| | | [P09XG260 (RED MARK)] | L1711 |
| | L5BDAXN00007 | LIQUID CRYSTAL DISPLAY(R) | L501U,L501U-P, |
| | | [P09SG120 (RED MARK)] | L501U-G,L501E, |
| | | | L501E-G,L501E-P |
| | | | L1501 |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|----------|--------------|---------------------------|-----------------|
| K5 | L5BDAXQ00027 | LIQUID CRYSTAL DISPLAY(G) | L701U,L701U-G |
| | | [P09XG220 (NO MARK)] | L701U--P,L701E |
| | | | L701E-G,L701E-P |
| | | | L1701 |
| | L5BDAXQ00033 | LIQUID CRYSTALDISPLAY(G) | L711U,L711E, |
| | | [P09XG260 (NO MARK)] | L1711 |
| | L5BDAXN00008 | LIQUID CRYSTALDISPLAY(G) | L501U,L501U-P, |
| | | [P09SG120 (NO MARK)] | L501U-G,L501E, |
| | | | L501E-G,L501E-P |
| | | | L1501 |
| K6 | L5BDAXQ00028 | LIQUID CRYSTAL DISPLAY(B) | L701U,L701U-G |
| | | [P09XG220 (BLUE MARK)] | L701U-P,L701E |
| | | | L701E-G,L701E-P |
| | | | L1701 |
| | L5BDAXQ00034 | LIQUID CRYSTAL DISPLAY(B) | L711U,L711E, |
| | | [P09XG260 (BLUE MARK)] | L1711 |
| | L5BDAXN00009 | LIQUID CRYSTAL DISPLAY(B) | L501U,L501U-P, |
| | | [P09SG120 (BLUE MARK)] | L501U-G,L501E, |
| | | | L501E-G,L501E-P |
| | | | L1501 |
| K7 | L6FAJACH0003 | FAN | ⚠ |
| K8 | L6FALDFH0002 | FAN | ⚠ |
| K9 | L6FCLFCH0001 | FAN | ⚠ |
| K10 | TBLB0035 | ADJUST LEG(FRONT) | |
| K11 | TBLB3058 | ADJUST LEG (REAR) | |
| G3 | TBMD995-1 | MODEL NAME PLATE | |
| | TBME067 | MODEL NAME PLATE | L701U-G |
| | TBME066 | MODEL NAME PLATE | L701U-P |
| | TBMD996-1 | MODEL NAME PLATE | L701E |
| | TBME068 | MODEL NAME PLATE | L701E-P |
| | TBME069 | MODEL NAME PLATE | L701E-G |
| | TBMD999-1 | MODEL NAME PLATE | L711U |
| | TBME001-1 | MODEL NAME PLATE | L711E |
| | TBME004-1 | MODEL NAME PLATE | L501U |
| | TBME074 | MODEL NAME PLATE | L501U-P |
| | TBME075 | MODEL NAME PLATE | L501U-G |
| | TBME005-1 | MODEL NAME PLATE | L501E |
| | TBME077 | MODEL NAME PLATE | L501E-G |
| | TBME076 | MODEL NAME PLATE | L501E-P |
| | TBMD997-1 | MODEL NAME PLATE | L1701 |
| | TBME006-1 | MODEL NAME PLATE | L1501 |
| | TBME002-1 | MODEL NAME PLATE | L1711 |
| K12 | TBXA28601 | CONTROL BUTTON 1 | |
| K13 | TBXA28701 | CONTROL BUTTON 2 | |
| K14 | TEEC0027 | ANALYSIS BLOCK | |
| K15 | TEEC5037 | DUCT | |
| K16 | THEC053U | SCREW (LCD PANEL ADJ) | |
| K17 | TKGP5042 | POLARIZING PLATE/IN(R) | |
| K18 | TKGP5043 | POLARIZING PLATE/IN(G) | |
| K19 | TKGP5044 | POLARIZING PLATE/IN(B) | |
| K20 | TKGF0037 | LENS | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|------------|-----------|-------------------------|------------------|
| K46 | TKKF5069 | HANDLE GUIDE | L701U,L701E, |
| | | | L501U,L501E |
| | | | L1701,L1501, |
| | TKKF5071 | HANDLE GUIDE | L701U-G,L701E-G, |
| | | | L501U-G,L501E-G |
| | TKKF5070 | HANDLE GUIDE | L701U-P,L701E-P, |
| | | | L501U-P,L501E-P |
| | TKKF5072 | HANDLE GUIDE | L711U,L711E, |
| | | | L1711 |
| K21 | TKKH5064 | VENTILATION COVER | L701U,L701E, |
| | | | L501U,L501E |
| | | | L1701,L1501, |
| | TKKH5067 | VENTILATION COVER | L701U-G,L701E-G, |
| | | | L501U-G,L501E-G |
| | TKKH5066 | VENTILATION COVER | L701U-P,L701E-P, |
| | | | L501U-P,L501E-P |
| | TKKH5068 | VENTILATION COVER | L711U,L711E, |
| | | | L1711 |
| K22 | TKKL5139 | LENS COVER | |
| K23 | TKKL5143 | RECEIPT COVER | L701U,L701E, |
| | | | L501U,L501E |
| | | | L1701,L1501, |
| | TKKL5153 | RECEIPT COVER | L701U-G,L701E-G, |
| | | | L501U-G,L501E-G |
| | TKKL5152 | RECEIPT COVER | L701U-P,L701E-P, |
| | | | L501U-P,L501E-P |
| | TKKL5154 | RECEIPT COVER | L711U,L711E, |
| | | | L1711 |
| K24 | TKNE035 | FILTER | |
| K25 | TKPA44201 | TERMINAL PANEL | L701U,L701E, |
| | | | L501U,L501E |
| | | | L1701,L1501, |
| | TKPA44203 | TERMINAL PANEL | L701U-G,L701E-G, |
| | | | L501U-G,L501E-G |
| | TKPA44202 | TERMINAL PANEL | L701U-P,L701E-P, |
| | | | L501U-P,L501E-P |
| | TKPA44204 | TERMINAL PANEL | L711U,L711E, |
| | | | L1711 |
| K26 | TKRA20701 | HANDLE | L701U,L701E, |
| | | | L501U,L501E |
| | | | L1701,L1501, |
| | TKRA20703 | HANDLE | L701U-G,L701E-G, |
| | | | L501U-G ,L501E-G |
| | TKRA20702 | HANDLE | L701U-P,L701E-P, |
| | | | L501U-P,L501E-P |
| | TKRA20704 | HANDLE | L711U,L711E, |
| | | | L1711 |
| K27 | TMZX5014 | FILTER COVER | |
| K28 | TNQE239 | REMOTE CONTROLLER | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|------------|-------------|---------------------------|--|
| G5 | TPCA96502A | CARTON | L701U |
| | TPCA96516A | CARTON | L701U-G |
| | TPCA96515A | CARTON | L701U-P |
| | TPCA96503A | CARTON | L701E |
| | TPCA96517A | CARTON | L701E-P |
| | TPCA96518A | CARTON | L701E-G |
| | TPCA96506A | CARTON | L711U |
| | TPCA96507A | CARTON | L711E |
| | TPCA96510A | CARTON | L501U |
| | TPCA96523A | CARTON | L501U-P |
| | TPCA96524A | CARTON | L501U-G |
| | TPCA96511A | CARTON | L501E |
| | TPCA96526A | CARTON | L501E-G |
| | TPCA96525A | CARTON | L501E-P |
| | TPCA96504A | CARTON | L1701 |
| | TPCA96512A | CARTON | L1501 |
| | TPCA96508A | CARTON | L1711 |
| G6 | TPDF0529 | ACCESSARY PACKING CASE | |
| G7 | TPDF0567-1 | CUSHION | |
| G8 | TPDF0584 | CARRYING PACKING CASE | |
| G9 | TPDF0591 | CUSHION | |
| G10 | TPEH124 | SET COVER | |
| G11 | TPEP001 | CARRYING CASE | |
| G12 | TQF86202 | LABEL | |
| G13 | TQZC010 | FAN BAG | L701U,L701U-G, |
| | | | L701U-P,L711U, |
| | | | L501U,L501U-P, |
| | | | L501U-G |
| G14 | TQBJ0070 | INSTRUCTION BOOK | L701E,L701E-P, |
| | | | L701E-G,L711E, |
| | | | L501E,L501E-G, |
| | | | L501E-P |
| | TQBJ0071 | INSTRUCTION BOOK | L1701,L1501, |
| | | | L1711 |
| G15 | XZBT6532 | BAG (Instruction Book) | L701E,L701E-P, |
| | | | L701E-G,L711E, |
| | | | L501E,L501E-G, |
| | | | L501E-P,L1701, |
| | | | L1501,L1711 |
| K29 | TSEX8005 | SWITCH |  |
| K30 | TSXA144 | POWER CORD |  L701U,L701U-G, |
| | | | L701U-P,L711U, |
| | | | L501U,L501U-P, |
| | | | L501U-G |
| K31 | TXFSX02VTFZ | POWER CORD |  L701E,L701E-P, |
| | | | L701E-G,L711E, |
| | | | L501E,L501E-G, |
| | | | L501E-P |
| K32 | TXFSX02VTHZ | POWER CORD |  L701E,L701E-P, |
| | | | L701E-G,L711E, |
| | | | L501E,L501E-G, |
| | | | L501E-P |

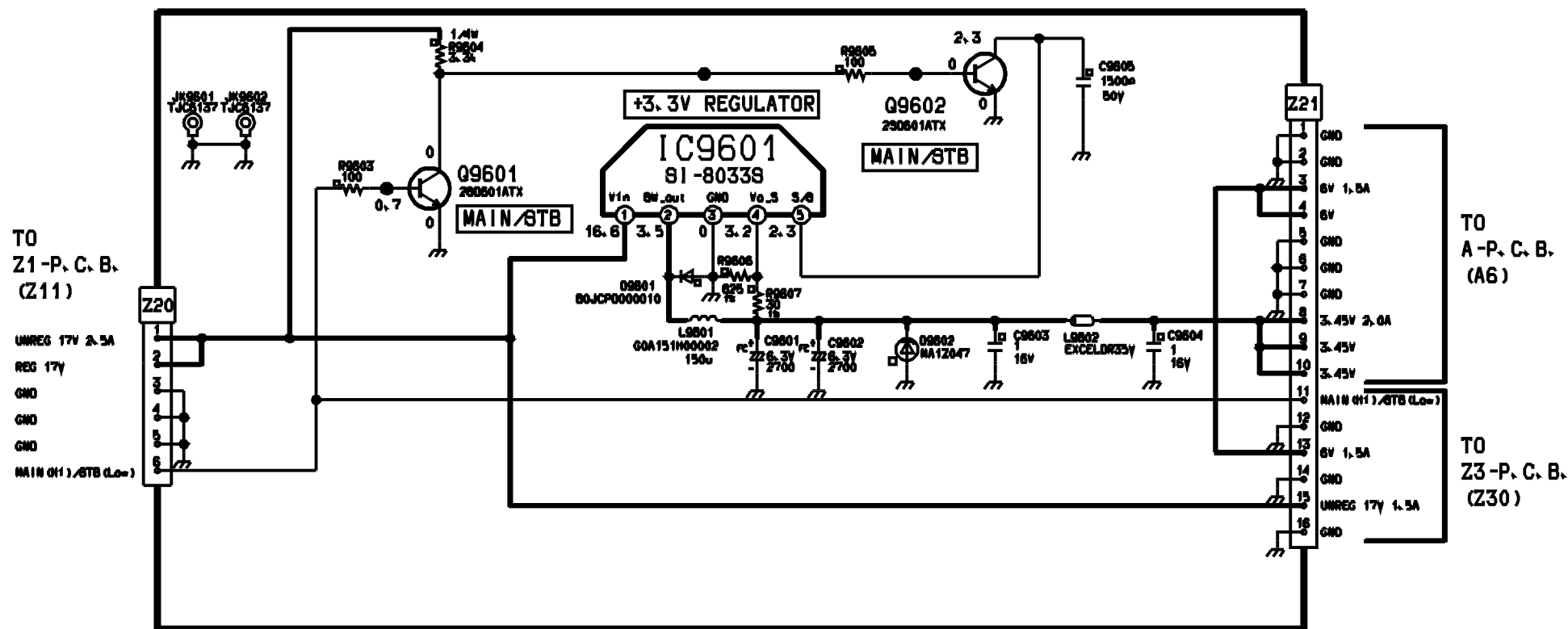
| Ref. No. | Part No. | Part Name & Description | Remarks |
|------------|--------------|-------------------------|---|
| K33 | TXFSX02PAEZ | POWER CORD |  L1701,L1501, L1711 |
| K34 | TSXF015 | AV CABLE | |
| K35 | TSXF163 | VGA CABLE | |
| K36 | TXFGP99VJD2R | POLARIZING PLATE/OUT(R) | L701U,L701U-G, L701U-P,L701E, L701E-P,L701E-G, L711U,L711E L1701,L1711 |
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| | TXFGP99VJD3R | POLARIZINGPLATE/OUT(R) | L501U,L501U-P, L501U-G,L501E, L501E-G,L501E-P, L1501 |
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| K37 | TXFGP99VJD2G | POLARIZINGPLATE/OUT(G) | L701U,L701U-G, L701U-P,L701E, L701E-P,L701E-G, L711U,L711E L1701,L1711 |
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| | TXFGP99VJD3G | POLARIZING PLATE/OUT(G) | L501U,L501U-P, L501U-G,L501E, L501E-G,L501E-P, L1501 |
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| K38 | TXFGP99VJD2B | POLARIZING PLATE/OUT(B) | L701U,L701U-G, L701U-P,L701E, L701E-P,L701E-G, L711U,L711E L1701,L1711 |
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| | TXFGP99VJD3B | POLARIZINGPLATE/OUT(B) | L501U,,L501U-P, L501U-G,L501E, L501E-G,L501E-P, L1501 |
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| K39 | TXFKF98VJD2 | UPPER COVER ASSY | L701U,L701E, L501U,L501E, L1701,L1501 |
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| | | | |
| | TXFKF98VJF3 | UPPER COVER ASSY | L701U-G,L701E-G, L501U-G ,L501E-G |
| | | | |
| | TXFKF98VJE9 | UPPER COVER ASSY | L701U-P,L701E-P, L501U-P,L501E-P |
| | | | |
| | TXFKF99PHNZ | UPPER COVER ASSY | L711U,L711E, L1711 |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|-----------------------|---------------------|-------------------------|---|
| K40 | TXFKF98VJD2A | BOTTOM COVER ASSY | L701U |
| | TXFKF98VJF3A | BOTTOM COVER ASSY | L701U-G |
| | TXFKF98VJE9A | BOTTOM COVER ASSY | L701U-P,L701E-P |
| | TXFKF97VJD2A | BOTTOM COVER ASSY | L701E |
| | TXFKF97VJF3A | BOTTOM COVER ASSY | L701E-G |
| | TXFKF99PHNZA | BOTTOM COVER ASSY | L711U |
| | TXFKF98PHNZA | BOTTOM COVER ASSY | L711E |
| | TXFKF93VJD2A | BOTTOM COVER ASSY | L501U |
| | TXFKF94VJE9A | BOTTOM COVER ASSY | L501U-P |
| | TXFKF94VJF3A | BOTTOM COVER ASSY | L501U-G |
| | TXFKF92VJD2A | BOTTOM COVER ASSY | L501E |
| | TXFKF93VJF3A | BOTTOM COVER ASSY | L501E-G |
| | TXFKF93VJE9A | BOTTOM COVER ASSY | L501E-P |
| | TXFKF96VJD2A | BOTTOM COVER ASSY | L1701 |
| | TXFKF91VJD2A | BOTTOM COVER ASSY | L1501 |
| | TXFKF97PHNZA | BOTTOM COVER ASSY | L1711 |
| K41 | TXFKK02VJD2A | LAMP COVER ASSY | L701U,L701E, L501U,L501E, L1701,L1501 |
| | TXFKK02VJF3A | LAMP COVER ASSY | L701U-G,L701E-G, L501U-G,L501E-G |
| | TXFKK02VJE9A | LAMP COVER ASSY | L701U-P,L701E-P, L501U-P,L501E-P |
| | TXFKK02PHNZA | LAMP COVER ASSY | L711U,L711E, L1711 |
| K42 | UDQFSDH05F | PBS FAN |  |
| K43 | XSN3+6FZ | SCREW | |
| K44 | XSN4+10 | SCREW | |
| G16 | XSS2+6FZ | SCREW(LCD PANEL) | |
| G17 | XTBT969Z | SCREW | |
| G18 | XYN3+F6 | SCREW | |
| G19 | XYN3+F8 | SCREW | |
| G20 | XYN3+F8FZ | SCREW | |
| G21 | XYN3+J10 | SCREW | |
| G22 | XYN3+J8 | SCREW(LENS) | |
| G23 | XYN4+E8 | SCREW | |
| K45 | TXFKG99VJD2 | OPTICAL BASE UNIT | L701U,L701U-G L701U-P,L701E L701E-G,L701E-P L1701 |
| | TXFKG99VJE3 | OPTICAL BASE UNIT | L711U,L711E L1711 |
| | TXFKG99VJD3 | OPTICAL BASE UNIT | L501U,L501U-P, L501U-G,L501E, L501E-G,L501E-P L1501 |
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| | | | |
| [INTEGRATED CIRCUITS] | | | |
| | | | |
| IC9601,02 | C0DAAGH00003 | I.C | |
| | | | |
| [TRANSISTORS] | | | |
| | | | |
| Q9601-04 | 2SD601AR | TRANSISTOR | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|--------------|--------------|-------------------------|---------|
| | | | |
| | | | |
| [DIODES] | | | |
| | | | |
| D9101 | ERZV14D471 | VARISTOR | ⚠ |
| D9601 | B0JCPD000010 | DIODE | |
| D9602 | MA1Z047 | DIODE | |
| D9603 | B0JCPD000010 | DIODE | |
| D9604 | MA1Z068 | DIODE | |
| | | | |
| | | | |
| [COILS] | | | |
| | | | |
| L9101 | G0BYYYH00002 | CHOKE COIL | ⚠ |
| L9601 | G0A151H00002 | CHOKE COIL | |
| L9602 | EXCELD35C | CORE | |
| L9603 | G0A221H00002 | CHOKE COIL | |
| L9604 | EXCELD35C | CORE | |
| | | | |
| [RESISTORS] | | | |
| | | | |
| R9101 | ERC12GK474 | S 470KOHM, K, 1/2W | ⚠ |
| R9603 | ERJ6GEYJ101 | M 100 OHM, J, 1/10W | |
| R9604 | ERJ14YJ332U | M 3.2KOHM, J, 1/4W | |
| R9605 | ERJ6GEYJ101 | M 100 OHM, J, 1/10W | |
| R9606 | ERJ6ENF8250 | M 825 OHM, 1/10W | |
| R9607 | ERJ6ENF30R0 | M 30 OHM, 1/10W | |
| R9608 | ERJ6GEYJ101 | M 100 OHM, J, 1/10W | |
| R9609 | ERJ6ENF8250 | M 825 OHM, 1/10W | |
| R9610 | ERJ6ENF5490 | M 549 OHM, 1/10W | |
| R9611 | ERJ6GEYJ101 | M 100 OHM, J, 1/10W | |
| R9612 | ERJ14YJ332U | M 3.2KOHM, J, 1/4W | |
| | | | |
| | | | |
| [CAPACITORS] | | | |
| | | | |
| C9101,02 | ECQU2A684MLA | P 0.68UF, 250V | ⚠ |
| C9103,04 | ECKCNA102MBB | C 1000PF, M, | ⚠ |
| C9601,02 | EEUFC0J272S | E 2700UF, 6.3V | |
| C9603,04 | ECJ2XF1C105Z | C 1UF, Z, 16V | |
| C9605 | EEUFC1A332 | E 3300UF, 10V | |
| C9606,07 | ECJ2XF1C105Z | C 1UF, Z, 16V | |
| C9608 | ECJ2XC1H152J | C 1500PF, J, 50V | |
| | | | |
| [OTHERS] | | | |
| | | | |
| A1-A3 | K1MN30B00033 | CONNECTOR | |
| F9101-1,-2 | TJC6320 | FUSE HOLDER, SMALL | |
| F9102-1,-2 | TJC6320 | FUSE HOLDER, SMALL | |
| JK1001 | TJSF42904 | CONNECTOR | |
| JK1003 | TJS1A7250 | HEADPHONE JACK | |
| JK1004 | TJS4A8390 | CONNECTOR | |

| Ref. No. | Part No. | Part Name & Description | Remarks |
|----------------------------|--------------|-------------------------|------------------|
| JK1005,06 | K1FB115B0066 | D-SUB 15P | |
| JK1007 | TJS1A7250 | HEADHONE JACK | |
| JK1008 | K2HA101B0022 | VIDEO INPUT TERMINAL | |
| JK1009 | K2HA101B0021 | AUDIO INPUT TERMINAL | |
| JK1010 | K2HA101B0020 | AUDIO INPUT TERMINAL | |
| JK9101,02 | TJC6137 | EARTH LUG | |
| JK9601-03 | TJC6137 | EARTH LUG | |
| K1 | TJS8A8570 | 2P CONNECTOR | |
| RM1001,02 | TNQ10483 | REMOCON RECEIVER | |
| RTL | TNPA1879 | CIRCUIT BOARD K | |
| RTL | TNPA1881 | CIRCUIT BOARD Z2 | |
| RTL | TNPA1932 | CIRCUIT BOARD Z3 | |
| | TXANP01VJD2 | CIRCUIT BOARD A | L701U,L701U-G, |
| | | | L701U-P,L701E |
| | | | L701E-P,L701E-G |
| | | | L711U,L711E |
| | | | L1701,L1711 |
| | TXANP01VJD3 | CIRCUIT BOARD A | L501U,L501U-P, |
| | | | L501U-G,L501E, |
| | | | L501E-G,L501E-P, |
| | | | L1501 |
| | TXANP02VJD2 | POWER UNIT ASSY | |
| S1001,02 | EVQPLHA15 | SWITCH | |
| S1003 | K0F115A00001 | SWITCH | |
| S1004,05 | EVQPLHA15 | SWITCH | |
| Z20 | TJS1A9490 | 6P CONNECTOR | |
| Z21 | TJS6A9350 | CONNECTOR | |
| Z30 | TJS1A9490 | 6P CONNECTOR | |
| | | | |
| [OPTION REMOTE CONTROLLER] | | | |
| | | | |
| | N2QAEA000001 | REMOTE CONTROLLER | |
| | N2FZ00000001 | REMOTE RECEIVER | |
| | K1EA08CD0002 | REMOTE CONTROLLER CABLE | PS/2 |
| | K1EA08CD0003 | MOUSE CABLE | MAC |
| | K1HB04CD0001 | MOUSE CABLE | USB |
| | TQFB242 | LABEL | |

Z2-P.C.Board TNPA1881



MC-Service

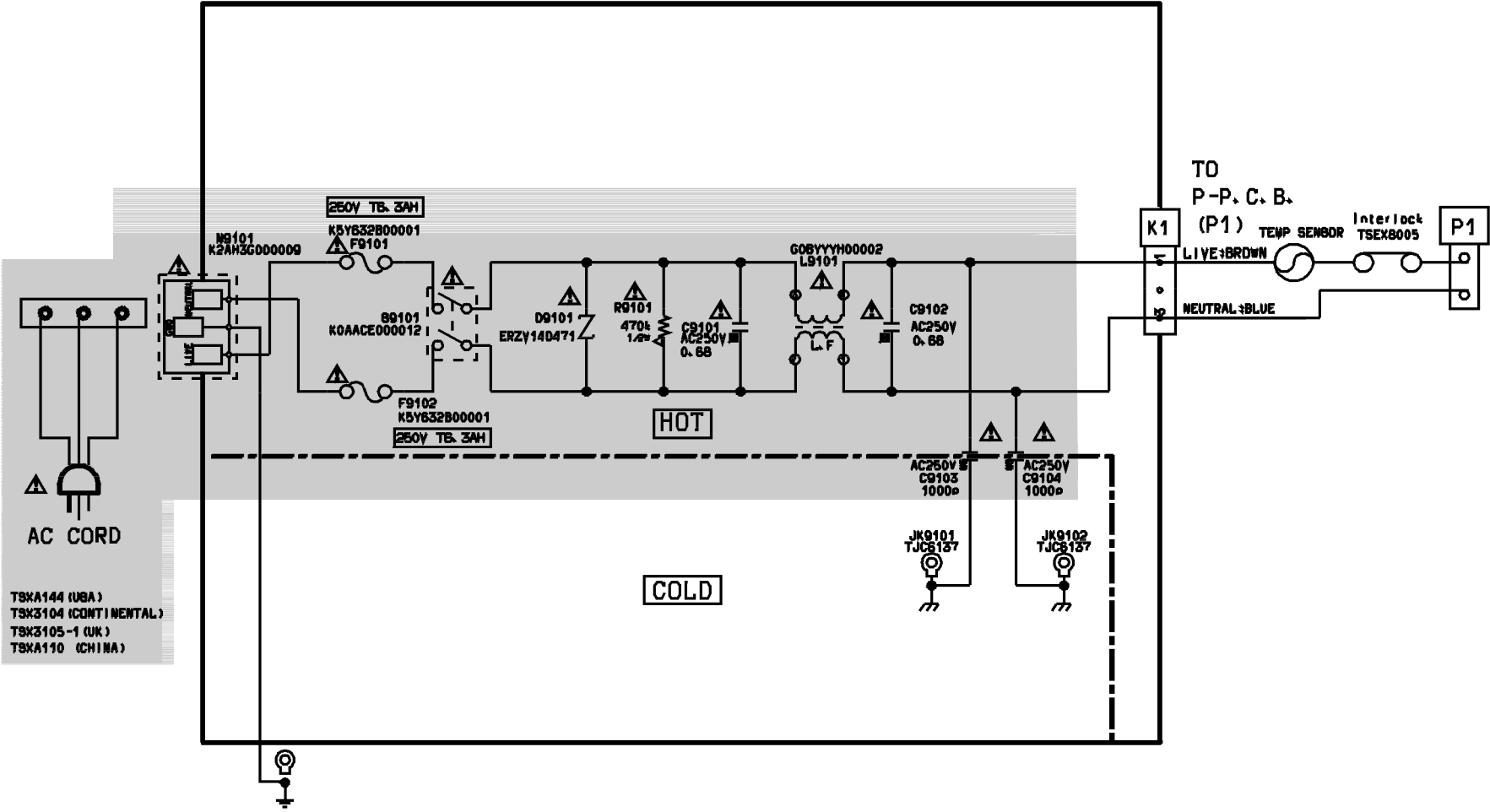
K-P.C.Board TNPA1879

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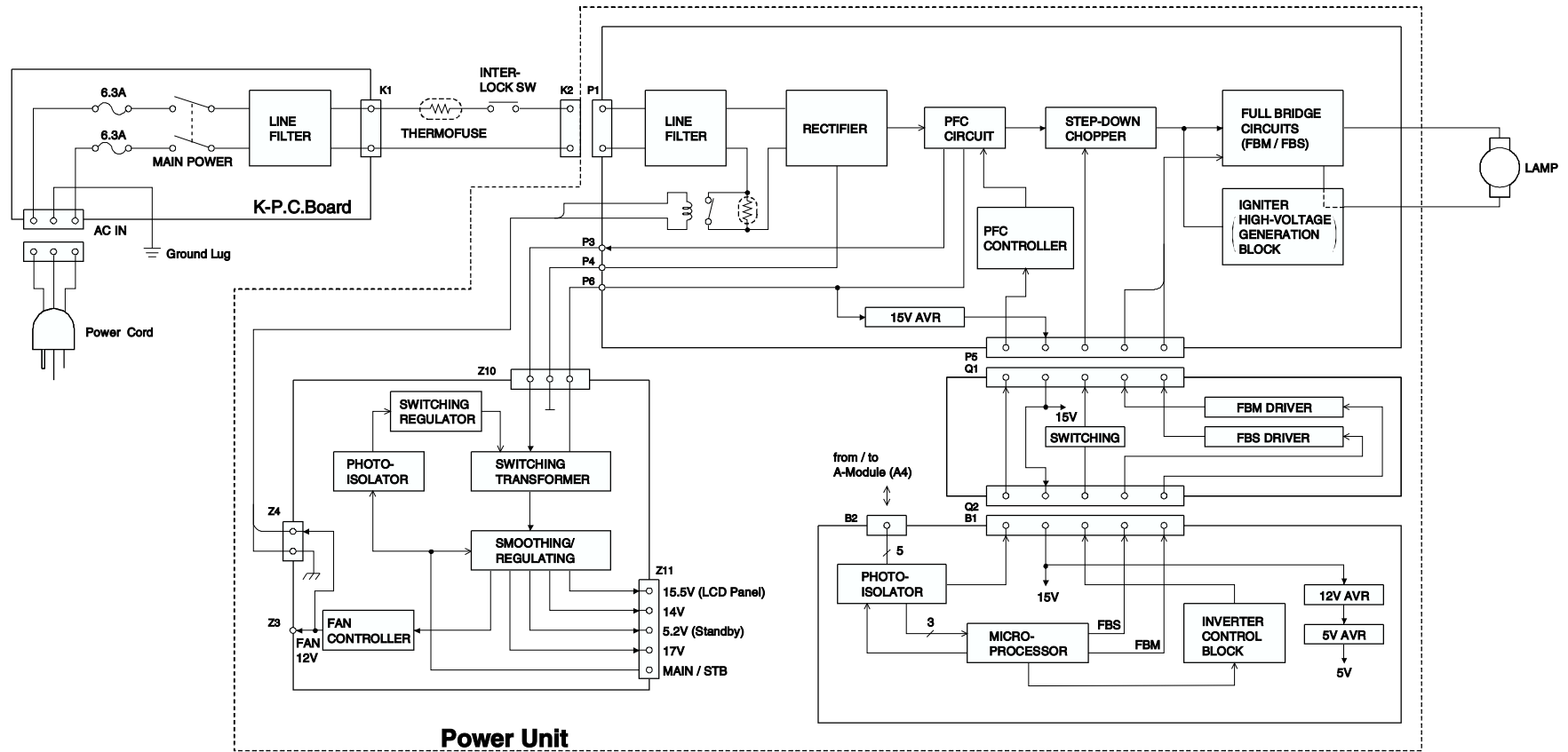
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FD**C**

MC-Service

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|---|---|---|---|---|---|---|---|---|

Power Supply

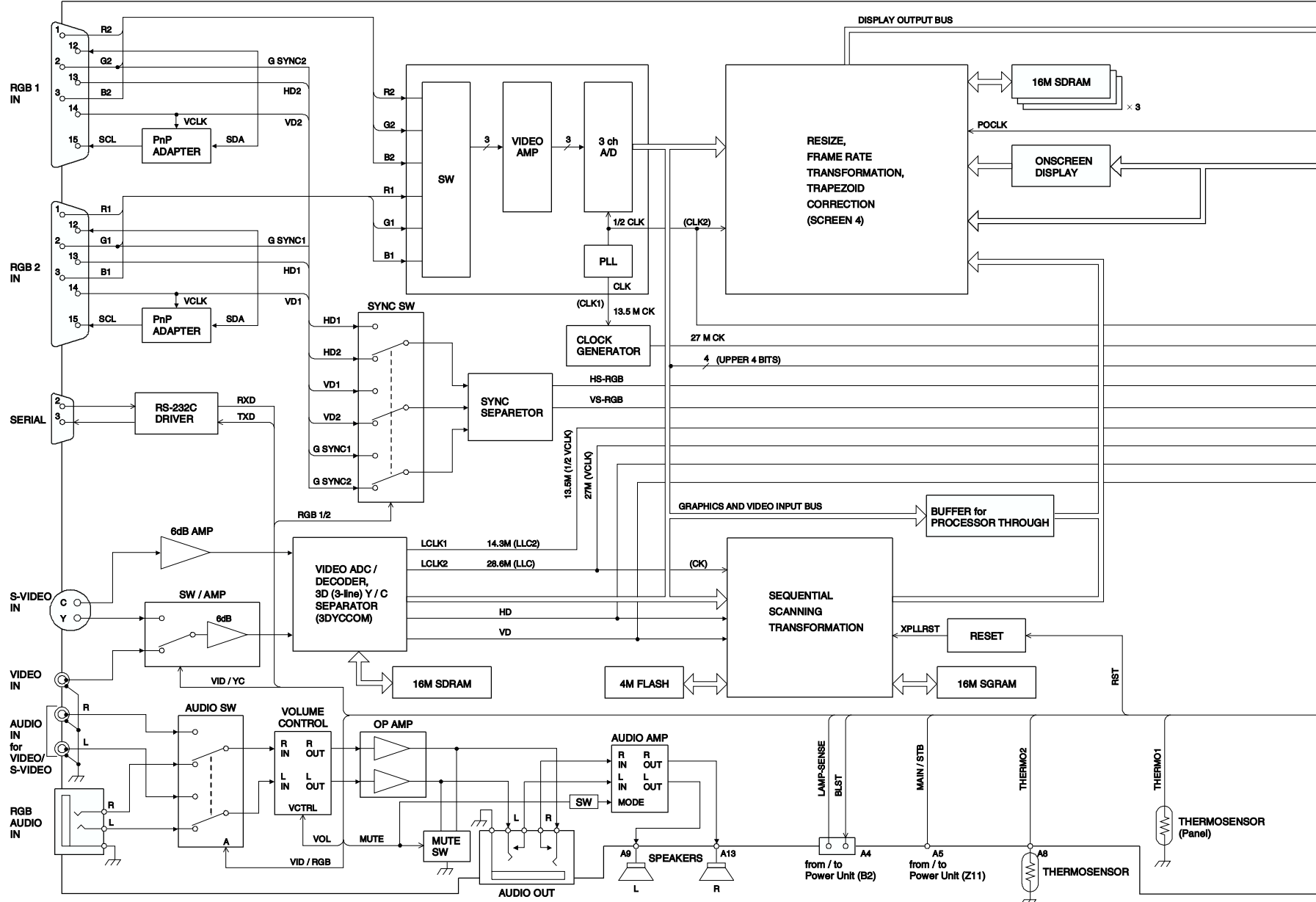


MC-Service

A

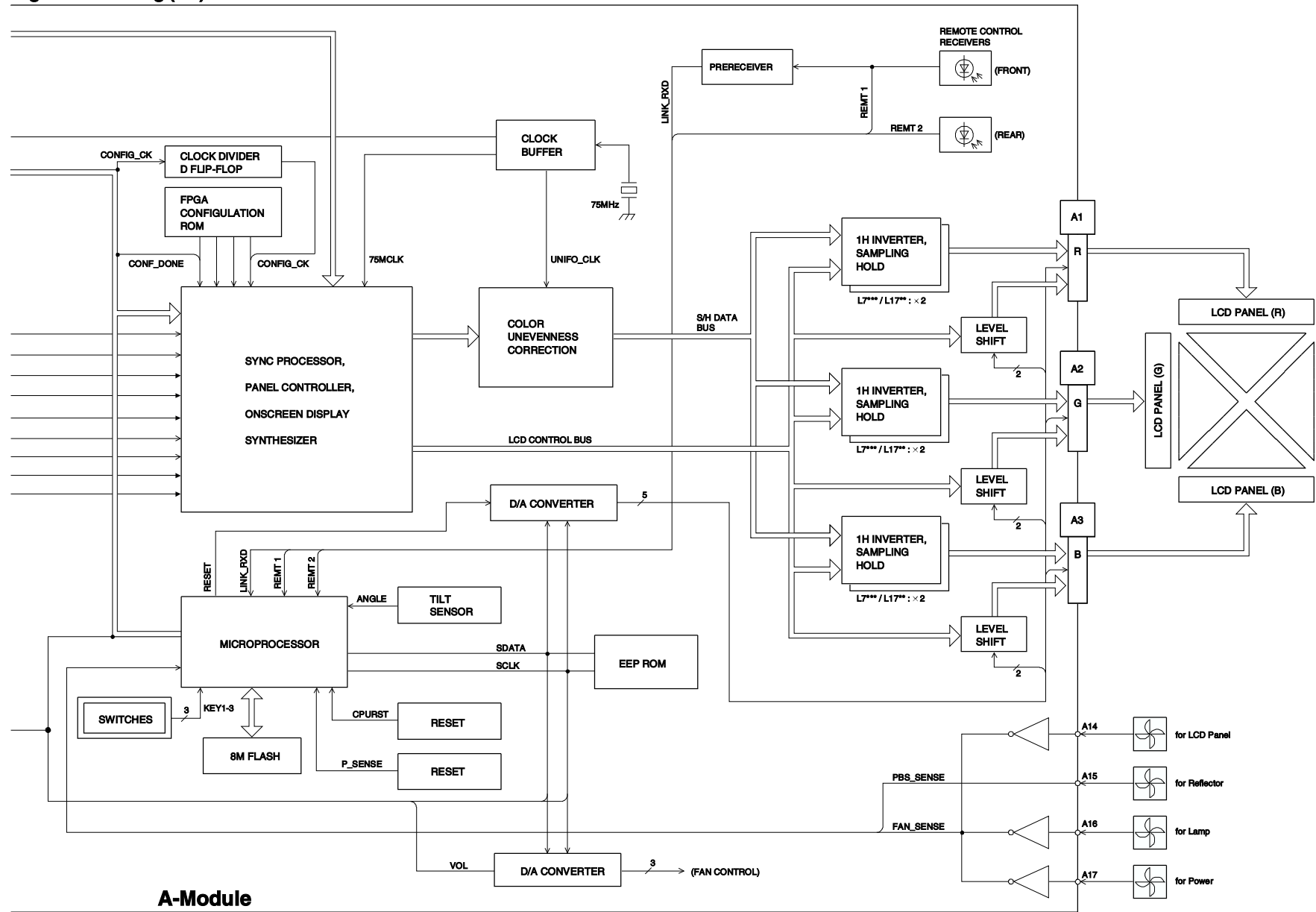


Signal Processing (1/2)



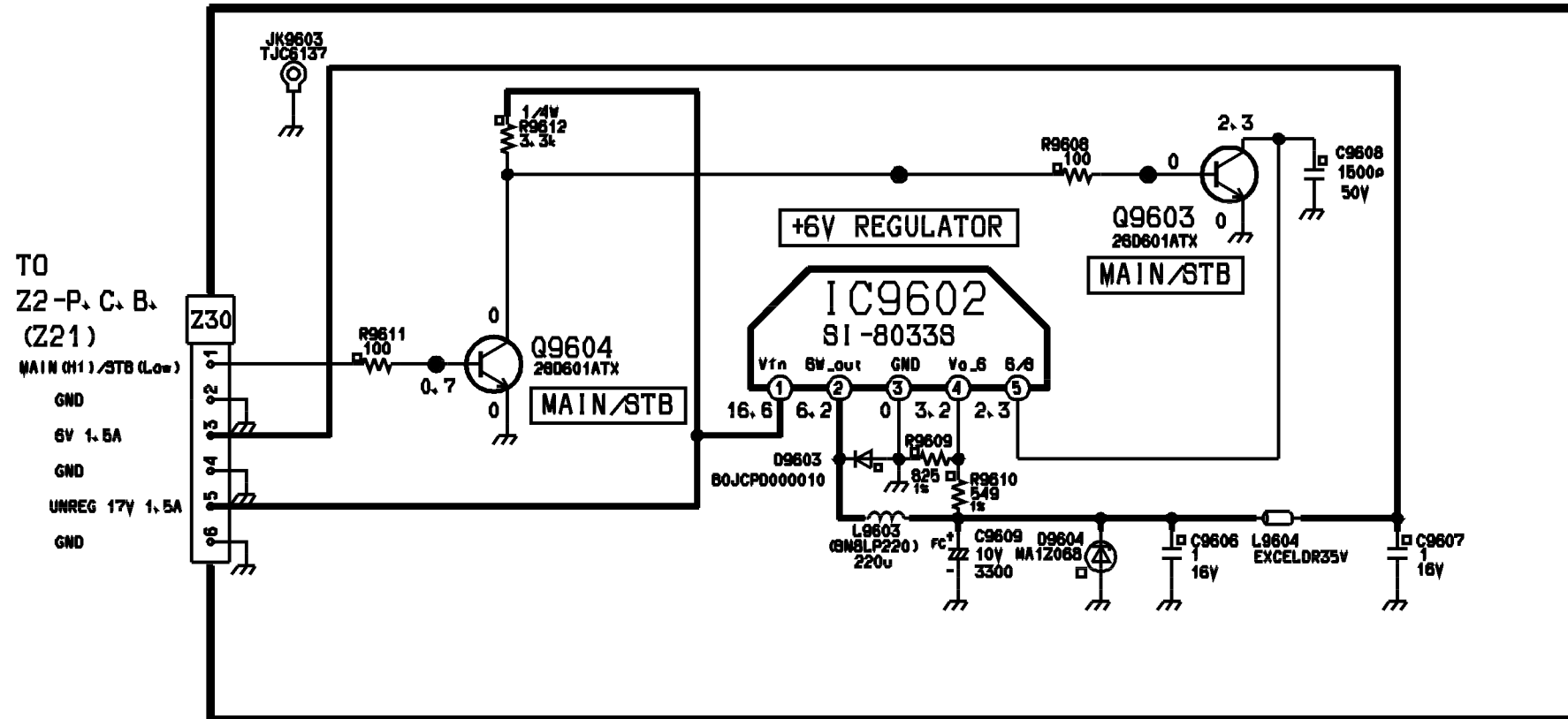
MC-Service

Signal Processing (2/2)



F

MC-Service



MC-Service